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PROJECTING MEDICAL SUPPLY REQUIREMENTS FOR A HIGHLY MOBILE FORWARD RESUSCITATIVE SURGERY ~~STATION~~ SYSTEM

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SUMMARY

Problem

Studies have shown that approximately 20% of those sustaining combat injuries are killed in action. A large percentage of combat deaths occur on the battlefield before evacuation to a medical facility occurs. For every casualty who dies of wounds in a hospital, nine have died prior to arriving. The challenge to medical planners is the placement of highly mobile, resuscitative surgery units as close to the point of injury as possible.

Objective

The primary objective of the study was to determine the medical supply requirements for a highly mobile forward resuscitative surgical system (FRSS). This system would be designed to act as an immediate follow-on to the care administered by corpsmen in the field using the recently upgraded first-responder medical supply set. To achieve the required level of mobility, FRSS procedures would be limited to those that could be conducted in an abbreviated, staged manner, including establishing surgical airways, reducing pneumothoraces, applying temporary measures to control surgical bleeding and contamination, followed by rapid closure of the chest and abdomen, and the application of arterial shunts.

Approach

Projecting materiel requirements involved four primary steps. First, the patient population was determined. Patient types with life- and limb-threatening injuries judged by Subject Matter Experts (SMEs) to be at risk for successful medical evacuation in a reasonable worst-case scenario were identified. Next, treatment profiles detailing the step-by-step process of providing a resuscitative intervention for these patients were developed. From the profiles, individual clinical tasks were derived. Once the individual clinical tasks had been defined, the SMEs assigned the materiel required to conduct them. Each data element was then organized into a model that described the patient work load and treatment process for an FRSS. Finally, a hypothetical patient stream was created to project the medical supply requirements for an 18 patient FRSS capability.

Results

SMEs identified 59 Patient Conditions (PCs) with injury profiles that met the conditions for forward surgery. From the treatment briefs prepared for each PC, SMEs identified 74 primary clinical procedures that would be conducted in the three functional areas of triage/pre-operative trauma management, operating room, and post-op. A computer program, written to take into account each element of the model, used the probabilities of each PC occurring to project the FRSS supply requirements. The projected materiel requirements for an FRSS are presented in the following table.

	Number of Items	Weight	Cubic Volume
FRSS Equipment	111	711.5	40.7
FRSS Consumables	166	663.5	61.8
Total FRSS	277	1375.0	102.5

Conclusions

The results of the study showed that by establishing clinical requirements and clearly identifying the parameters of care, the mobility of surgical assets can be greatly enhanced. While not all clinical procedures traditionally conducted at Marine Corps surgical facilities can be conducted in this environment, the SMEs participating in the study generally agreed that the trade-offs in surgical care were reasonable and that the ability to clinically intervene sooner was considered of great importance.

The methodology used in the current study was designed to support the examination of multiple facets of the Marine Corps field medical system. It is structured modularly, which provides flexibility in adding or reducing capabilities when projecting the effect of a change in the system is desired. With regard to the FRSS, this flexibility permits the examination of additional issues to determine their affect on providing field medical care. For example, it may be prudent to determine the required number of FRSSs needed to support missions of various sizes, where to place them to realize the optimal benefit, or how variations in evacuation times effect patient throughput. In this era of scarce resources and reduced budgets, it becomes important to leverage the value of assets. In this regard, as the shelter concepts to house the FRSS are developed, they may have utility in other missions such as a battalion aid station, a mobile sick call, staging a preventive medicine capability, or in providing civilian care during military missions other than war. These questions can be answered by programming factors into the model that are descriptive of the issues under investigation, and by assessing their impact on the system's ability to perform the mission.

Projecting Medical Supply Requirements for a Highly Mobile Forward Resuscitative Surgery System

INTRODUCTION

The Joint Chiefs of Staff's conceptual framework for achieving new levels of war-fighting effectiveness, Joint Vision 2010, offers direction in an increasingly lethal battlefield confronting U.S. forces.¹ This direction takes the form of increased mobility, dispersion, and pursuit of a higher tempo of operations among elements within the battle space. The capability to control the tempo of operations will help U.S. military forces seize and maintain the initiative during military operations.

In all operations, technological advances will give war-fighters major advantages over potential adversaries.¹ They will have an increased awareness of the overall operational environment, allowing them to make better decisions more rapidly. They will have an enhanced ability to exact a range of potential effects on adversaries by bringing together the correct mix of assets at the place and time most favorable to success. Wherever operating, war-fighter capability will be enhanced by connectivity to each other, their commanders, and also to supporting elements such as, highly capable and optimally positioned medical assets.

Achieving a medical capability consistent with the purpose and intent of these warfighting plans requires a reexamination of current approaches to positioning medical assets. The design of Marine Corps medical assets does not allow the full scope of the new war-fighting models to be realized. Clearly, some aspects of the Marine Corps' field medical system have been reengineered to achieve greater mobility and faster response without compromising the high level of care traditionally administered to our forces. This is the case with the integration of Shock Trauma Platoons into the surgical companies. These highly capable units are designed to rapidly deploy in support of a Battalion Aid Station (BAS) using assets organic to the medical battalions.² Because they provide a level of clinical care that stops short of performing resuscitative surgery, they cannot, however, provide the full spectrum of required field care without the associated footprint of a surgical company.

Studies have shown that approximately 20% of those sustaining combat injuries are killed in action.³⁻⁵ A large percentage of combat deaths occur on the battlefield before evacuation to a medical facility occurs. For every casualty who dies of wounds in a hospital, nine have died prior to arriving. In Vietnam, 50% of soldiers killed in action died of exsanguination on the battlefield. An examination of 100 casualties killed in Vietnam, prepared by the Joint Technical Coordinating Group on Munitions Effectiveness, reported that 67% had died within ten minutes of wounding.⁶ However, of the remaining killed in action, the large majority died within 10 to 60 minutes of wounding. This population represents a group of potentially salvageable casualties should the appropriate medical response be positioned.

The challenge to medical planners both from an historical perspective and in response to new war-fighting concepts, is effective positioning of a highly capable first responder at the point of injury and the placement of highly mobile, resuscitative surgery units as close to the first

responder as possible. Recently, significant advances have been made that address the issue of providing enhanced first responder capability. Because the new operational scenarios will exact a greater reliance upon the corpsman, a significantly upgraded medical supply set has been developed.⁷ Designed to replace the Unit One corpsman medical bag, this upgraded supply set gives the first responder lifesaving capability not previously available. Within the set are items that give corpsmen greater capability to sustain a casualty's life for longer periods of time such as chest-tube sets, angio-catheters and volume expanders, intubation kits, chest seals with one-way valves, and higher-grade pressure dressing supplies for improved hemorrhage control. The goal of this effort has been to facilitate more casualties reaching the next level of care in time for successful resuscitation to occur.

Currently, the next level of care, closest to the point of injury is considered the BAS. Here, more sophisticated lifesaving procedures may be employed. However, for those casualties with uncontrollable internal hemorrhage, increasing intracranial pressure, or potentially salvageable ischemic extremities, no effective intervention can occur until the surgical company is reached. This delay increases the number of killed in action.⁵ Because the deployment of a surgical company ashore is not necessarily the best fit with the new operational scenarios, the prospect of a shore-based surgical presence becomes increasingly remote. Without a shore-based surgical presence, casualty treatment and receiving ships (CRTSs) lying over the horizon become the closest resuscitative base of operations for those requiring immediate, lifesaving surgery. Subsequently, the delay reaching a resuscitative surgical site is further increased.

Medical planners, therefore, are faced with a gap in lifesaving medical capability between the BAS and the CRTSs. Filling this gap requires achieving two, seemingly contradictory, objectives simultaneously. First, some operational scenarios require a shore-based surgical capability to minimize the number of killed in action, and second, this capability must be small and light enough to keep up with aggressive operational tempos. To provide shore-based surgical capability today requires in excess of 10 tons of materiel⁸⁻¹¹. Clearly, this is unsupportable. Therefore, it becomes necessary to rethink the concept of forward resuscitative surgery.

It is expected that the implementation of the upgraded corpsman medical supply set will increase the corpsman's ability to sustain a casualty until further clinical intervention can be achieved. It follows then that this new capability may increase the length of time from wounding to death. The ideal approach then becomes the placement of a resuscitative surgery capability as close as possible to the first-responder. In this way, a far-forward surgical presence would interact with the corpsman as a system that optimizes the continuity of care available to the seriously wounded marine. Casualties treated by the corpsman in the field arrive at the surgical site in a clinical condition that maximizes the success of a resuscitative surgical intervention. Addressing the required level of mobility, however, presents slightly more challenging objectives. Before such a Forward Resuscitative Surgery System (FRSS) is developed, it is important to determine the level of care and the extent of the resuscitative intervention. Whatever the level of care identified, it must be supportable with a minimum of materiel to not only resuscitate casualties but also to sustain them for unforeseeable periods of time awaiting evacuation.

Surgery for major trauma typically follows a well-developed sequence of steps consisting of access, exposure, control of bleeding, and reconstruction. This sequence represents an approach

whereby both the life-threatening injuries, and reparations to the damaged systems are addressed during the same primary procedure.¹² This clinical approach is time-consuming and supply intensive. To some extent, the current surgical company incorporates this approach to surgery. For example, materiel required to perform vascular repair and colonic anastomosis, which may be considered reparative in nature, are stocked.

Definitive surgical interventions, which include reparative procedures, are not only difficult surgical challenges but often must be terminated prematurely because of uncontrollable physiological events, such as dilutional coagulopathy, hypothermia, and metabolic acidosis.^{12,13} In recent years, the emphasis in trauma management has shifted from definitive procedures to abbreviated, staged surgical interventions. The primary objectives of this surgical approach are the application of temporary measures to control surgical bleeding and contamination, followed by rapid closure of the abdomen. When normal physiology has been restored, reexploration and definitive repair to damaged organ systems is attempted. Experience in a number of trauma settings with staging surgical interventions has shown that not only are the time and supply requirements minimized in resuscitating a severely hypovolemic patient but patient outcomes are also improved.¹⁴⁻¹⁷

For an FRSS, it is proposed that the level of care be strictly limited to abbreviated, staged procedures. Using this approach, the clinical objectives are restricted to (1) arresting the bleeding and inciting coagulopathy, hypothermia, and acidosis through ligation and solid organ tamponade; (2) limiting contamination and the secondary inflammatory response by stapling or tape ligation of the bowel and by copious irrigation; (3) applying vascular shunts to temporarily maintain distal perfusion; and (4) reducing intracranial pressure through the use of the burr hole procedure.

Limiting the parameters of care makes the concept of a highly mobile FRSS more reasonable and potentially achievable. In the current study, data were obtained from various sources to determine the materiel requirements to support resuscitative surgery in a dynamic environment. Panels of Subject Matter Experts (SMEs) were assembled at various points throughout the development of the FRSS concept, experimental resuscitative surgical procedures were observed, shelter designs for resuscitative surgery from each of the three services were examined, and the experiences of surgical teams conducting surgical procedures in some of the experimental shelters were reviewed. The data derived from each of these sources were assembled into a model that was used to project weight and volume requirements necessary to achieve the objectives of FRS in a highly mobile, dynamic operational scenario.

METHOD

Projecting materiel requirements for an FRSS involved four primary steps. First, the patient population was determined. Patient types with life- and limb-threatening injuries judged by SMEs to be at risk for successful medical evacuation in a reasonable worst-case scenario were identified. Next, treatment profiles detailing the step-by-step process of providing a resuscitative intervention for these patients were developed. From the profiles, individual clinical tasks were derived. Once the individual clinical tasks had been defined, the SMEs assigned the materiel

required to conduct them. Finally, a hypothetical patient stream was created to project the medical supply requirements for an 18 patient FRSS capability.

Participants

Eleven clinical SMEs from each of the three services were selected to participate in the various clinical panels held throughout the data collection phase of the study. The clinical specialties within the groups included five surgeons, two anesthesiologists, two emergency medicine physicians, and two critical care nurses. The clinical trauma experience of the participants was diverse and included both those with operational experience providing forward resuscitative surgical care and those practicing trauma surgery in a military research setting.

Identifying the Patient Population

Establishing the parameters of care was critical to the study. Each deviation from the predetermined parameters incurred costs in terms of lowered mobility and flexibility for the system. Therefore, it was imperative that the range of medical care to be provided be clearly defined. Identifying the target casualty population was the first step in this process. To select this population, a database of Patient Conditions (PCs) developed by the Joint Readiness Clinical Advisory Board (JRCAB), was consulted.¹⁸ This database is a group of diagnoses developed to represent the range of injuries and disease non-battle injuries known to occur in a theater of operations. SME panels were presented with the battle injury subset of the database and the injury profiles describing the clinical signs and symptoms of each of the PCs. From this subset, the SMEs identified those PCs with injury profiles and signs and symptoms considered indicative of potential resuscitative surgery candidates.

Creating Casualty Treatment Profiles

Once the FRSS PC candidates were identified, panels of SMEs constructed treatment profiles describing the clinical care each PC would be administered within the FRSS. This was the second point in the study where establishing clinical parameters was critical. Before the protocols were prepared, SMEs defined the range of care that would be provided. To ensure materiel requirements were supportable, the care was limited in scope to the minimum required to provide resuscitation and staged surgical intervention to those who could not be adequately treated with existing level one care. Defining the range of care was conducted for three treatment functions including triage/pre-operative care, surgery, and post-operative care. An example of a treatment profile for one of the PCs is shown in Table 1. Because of unsupportable logistical burdens, some of the capability normally associated with Marine Corps surgical units was dropped in favor of increased mobility. For example, refrigeration for medicinals, radiological capability, supplemental oxygen outside that required for the administration of anesthesia, and steam sterilization techniques are not reflected in the treatment profiles.

Table 1
Treatment Profile for PC 176
Wound to the Pelvis & Abdomen with Penetrating/Perforating Injury to the Spleen and Bladder

Function	% Patients	Task	Task Description	Time/m	# Times
Triage	100	001	Triage	2	1
Triage	100	002	Assessment & Evaluation of Patient Status	2	2
Triage	100	006	Establish Adequate Airway	4	4
Triage	100	017	Suction (oral/trach/endo)	3	1
Triage	100	019	Emergency Control of Hemorrhage	8	1
Triage	100	024	Measure Vital Signs	3	2
Triage	100	049	Start Intravenous Infusion Site	4	2
Triage	100	050	Administer Intravenous Infusion	2	3
Triage	100	070	Bowel Sounds Assessment	2	1
Triage	100	071	Insert Oro/Naso Gastric Tube	5	1
Triage	25	079	Catheterization-Foley	4	1
Triage	75	080	Catheterization-Suprapubic	5	1
Triage	100	084	Shave & Prep Patient	5	1
Triage	100	103	Circulation Check	2	1
Triage	25	127	Patient Restraint	4	1
Triage	100	145	Administer Appropriate Medication	5	1
Triage	75	149	Blood Drawing – Venous/Arterial	4	1
Triage	100	197	Charting & Paperwork	8	1
Triage	75	595	Blood Gas Estimate	3	1
Triage	75	596	Determine Electrolyte Levels	3	1
Triage	75	614	Determine Hematocrit Level	3	1
Triage	100	748	Assemble Material/Cleanup	4	1
Triage	08	999	Morgue Care	10	1
Triage	10	Z027	Cardiac Resuscitation	10	1
Triage	100	Z083	Expose Patient for Examination	2	1
Op-Room	100	339	Operating Room Preparation	4	1
Op-Room	100	344	Operating Room Team Preparation	2	1
Op-Room	100	351	Patient Preparation	4	1
Op-Room	100	530	Induce/Maintain General Anesthesia	45	1
Op-Room	100	595	Blood Gas Estimate	3	2
Op-Room	100	596	Assess Electrolyte Levels	3	2
Op-Room	100	614	Assess Hematocrit Level	3	1
Op-Room	100	ZZ32	Perform Abbreviated Laparotomy	45	1
Op-Room	100	537	Recovery/Release from Anesthesia	30	1
Op-Room	100	354	Operating Room Cleanup	10	1
Op-Room	100	ZZ18	Clean & Prepare Surgical Instrument Sets	15	1
Post-Op	100	003	Assessment & Evaluation of Patient Status	4	6
Post-Op	75	017	Suction (oral/trach/endo)	3	2
Post-Op	100	024	Measure Vital Signs	3	6
Post-Op	100	032	Set-Up Pulse Oximeter	1	1
Post-Op	75	038	Maintain on Ventilator	240	1
Post-Op	100	050	Administer Intravenous Infusion	3	4
Post-Op	100	062	Administer Intravenous Infusion – Packed RBCs	6	2
Post-Op	100	070	Bowel Sounds Assessment	2	2
Post-Op	100	075	Irrigate Oro/Naso Gastric Tube	2	1
Post-Op	100	145	Administer Appropriate Medication	11	1
Post-Op	100	149	Blood Drawing – Venous/Arterial	5	2
Post-Op	100	595	Blood Gas Estimate	3	2
Post-Op	100	596	Determine Electrolyte Levels	3	2
Post-Op	100	614	Determine Hematocrit Level	3	2
Post-Op	100	197	Charting & Paperwork	4	4
Post-Op	100	242	Bladder Irrigation	5	1
Post-Op	100	ZZ19	Warm Intravenous Infusion Fluids	3	1
Post-Op	75	ZZ33	Patient Core Warming	30	1
Post-Op	100	328	Discharge Patient	4	1
Post-Op	100	748	Assemble Material/Cleanup	5	1

During the process of creating the treatment profiles, additional information necessary to optimize the supply projections was collected and assembled into the model. The first of these was the probability that casualties would be administered each of the tasks in the treatment profiles. These data, shown in the *% Patients* column of Table 1, were collected to reflect the potential for the same PC to present with slightly varied clinical manifestations. For example, Table 1 shows a lower probability assigned to placement of a Foley catheter than that assigned the placement of a suprapubic catheter. By capturing the variability in clinical approaches, such as the potential for different urinary catheterization indications in pelvic cases, greater precision in projecting materiel requirements was achieved.

Table 1 further shows two additional elements of information collected from the SMEs. The first of these were estimates of the amount of time, expressed in minutes, that each task could be expected to require. These data are shown in the column labeled *Time*. In addition, data were captured to estimate the number of times each task would be conducted while the casualty was present in each of the functional areas. These data are reflected in the column labeled *# Times*.

Assigning Medical Supplies to the Treatment Profiles

Each treatment profile provided, in step-by-step fashion, the specific care to be provided each of the FRS PCs. Each step in the profiles reflected a particular clinical task to be conducted within the parameters of care established by the SMEs. Panels of SMEs examined the tasks in the context of each PC and assigned the appropriate mix of materiel to conduct the tasks. This process eventually yielded the mix of supplies to be used in the FRSS. This process also introduced new approaches to providing care not currently in use by the Marine Corps. Because weight and cube limitations dictated the clinical options available in the FRSS concept, new approaches reflecting advances in medical equipment technology were identified. These new approaches to care, such as miniaturized pulse oximeters and rapid disinfecting techniques for surgical instruments permitted advancement of the FRSS concept by minimizing supply requirements.

Projecting FRSS Medical Supply Requirements

At the conclusion of the supply assignment process, all components of the model required to generate supply projections had been assembled. This included the identification of the patient population, the creation of an FRSS-specific treatment profile that reflected each clinical task to be conducted on each patient in the population and the medical supplies required to effectively administer the care identified within the treatment profiles.

Projecting medical supply requirements was accomplished by running a simulation of patients entering the FRSS. The patient stream was composed of a mix of the PCs the SMEs identified as FRSS candidates. The likelihood of each PC presenting at the FRSS was determined by assigned probabilities. The probabilities assigned to the PCs were derived from the Patient Generating Model (PATGEN).¹⁸ PATGEN uses user-defined input, such as geographical location, battle intensity, troop mix, and rate of buildup, to project both the number of anticipated casualties and the distribution of PCs reflected in the casualty stream.

In this simulation, each PC probability was multiplied by the number of patients the FRSS was being designed to support. The adjusted PC probabilities were then multiplied by each factor in the model. These included the supply quantity associated with each task in the treatment profiles, the probability each task would be performed, and the number of times that each task would be conducted. This product resulted in the distribution of supplies required for each PC. The supplies were then summed across PCs to produce the final estimate of supply requirements.

RESULTS

FRSS Patient Condition Candidates

SMEs were provided criteria to apply in their determination of which PCs would be considered FRSS candidates. The SMEs were instructed to select only those PCs representing patients with injury profiles that could not be adequately addressed with level one care and would require a lifesaving surgical intervention prior to evacuation. Based on these criteria, the SMEs identified 59 candidate FRSS PCs. The list of these PCs is shown in Appendix A.

FRSS Treatment Tasks

An examination of the treatment profiles created for each of the PCs yielded the clinical tasks to be conducted within the FRSS. Because the SMEs created a profile for each functional area of the facility, tasks were identified for triage, the operating room, and for post-op/holding. It should be noted that the placement of the tasks into functional areas is a method of organizing the patient work load for modeling purposes and is not meant to suggest that the operation of the FRSS would occur within such a rigid framework. Rather, the FRSS will be a fluid system, with the performance of many of the tasks occurring in multiple functional areas. Table 2 shows the tasks and the functional areas required to support performance of the tasks.

Table 2
Clinical Tasks Conducted in Each FRSS Functional Area

Triage	Op-room	Post-op	Task No.	Task Description
✓			001	Triage
✓		✓	002	Assessment & Evaluation of Patient Status
✓			006	Establish Adequate Airway
✓			007	Emergency Cricothyroidotomy
✓		✓	010	Neurological Assessment
✓			011	Stabilize Neck/Spine (Collar/Spineboard)
✓	✓	✓	017	Suction (Oral/Endo/Trach)
✓			019	Emergency Control of Hemorrhage
✓		✓	024	Measure Vital Signs
✓	✓	✓	032	Set-Up Pulse Oximeter
		✓	038	Maintain Patient on Ventilator
✓			044	Set-Up Drainage Bottles/Pleurevac
✓		✓	046	Conduct Chest-Tube Suction
✓			049	Start/Change IV Infusion Site
✓		✓	050	Administer IV Infusion
	✓		062	Administer IV Infusion -- Packed RBCs
✓			065	Insert Central Venous Lines/Large Bore Access

Triage	Op-room	Post-op	Task No.	Task Description
✓		✓	070	Assess Bowel Sounds
✓			071	Insert Naso/Oro Gastric Tube
✓		✓	073	Conduct Naso/Oro Gastric Tube Suction
		✓	075	Irrigate Naso/Oro Gastric Tube Suction
✓			079	Catheterization - Foley
✓			080	Catheterization - Suprapubic
		✓	082	Measure/Record Patient Output
✓			084	Shave & Prep
✓		✓	093	Elevate Extremity
✓			098	Apply Splint/Immobilize Injured Extremity
✓		✓	103	Circulation Check
✓	✓	✓	104	Compartment Pressure Check
✓	✓		105	Doppler Assessment
✓			121	Eye Irrigation
✓		✓	126	Seizure Care Precautions
✓			127	Perform Patient Restraint
✓	✓	✓	145	Administer Appropriate Medications
✓	✓	✓	149	Blood Drawing Venous
		✓	191	Give a Urinal/Bedpan
✓	✓	✓	191	Charting & Paper Work
✓			221	Pericardiocentesis
		✓	242	Bladder Irrigation
		✓	328	Discharge Patient
	✓		339	Operating Room Preparation
	✓		344	Patient Preparation in the Operating Room
	✓		351	Operating Room Team Preparation
	✓		354	Operating Room Clean-Up
	✓		358	Perform Surgical Airway Procedure
	✓		402	Issue Operating Room Basic Consumable Set Up
	✓		403	Burr Hole Procedure
	✓		494	Thoracotomy
	✓		530	Induce/Maintain Anesthesia
	✓		533	Induce/Maintain Regional Block
	✓		537	Recovery/Release from Anesthesia
✓	✓	✓	595	Blood Gas Estimate
✓	✓	✓	596	Determine Electrolyte Levels
✓	✓	✓	614	Determine Hematocrit Level
✓		✓	748	Assemble Material/Clean-Up
✓			999	Morgue Care
	✓		1012	Amputation
✓			Z014	Intubate Patient
✓		✓	Z027	Cardio Arrest Resuscitation
✓		✓	Z038	Maintain on Bag Valve Mask
✓			Z042	Insert Chest Tube
		✓	Z045	Change Drainage Bottles/Pleurevac
✓			Z083	Expose Patient For Exam
✓			Z094	Extremity Traction - Application/Adjustment
✓			Z177	Perform Diagnostic Peritoneal Lavage
	✓		Z378	Vascular Shunt - Temporary Ligation
✓			ZZ03	Perform Needle Thoracostomy
✓	✓		ZZ18	Clean & Prepare Instruments
	✓	✓	ZZ19	Warm Infusion Fluids
✓			ZZ20	Perform Bladder Drainage
	✓		ZZ32	Abbreviated Laparotomy
		✓	ZZ33	Patient Core Warming
✓			ZZ34	Perform Ultrasound Assessment

Once the treatment profiles had been created and the tasks extracted, SMEs assigned the supply requirements necessary to support the tasks. Because the operating room acts as the clinical focal point of the facility, the tasks and equipment in the functional areas of triage and post-op were designed and supplied to support the procedural interventions conducted during surgery. Therefore, the SMEs assigned the equipment and consumable requirements for the operating room tasks first. The primary objective guiding the SMEs in the selection of instrumentation was to limit materiel to that required to perform the specific surgical procedures recorded in the treatment protocols. Furthermore, the SMEs agreed that the FRSS concept must be supplied with materiel that is geared toward providing the most good for the greatest number. This meant that extraordinary lifesaving efforts that are time or materiel intensive were not considered appropriate or consistent with the mission of the FRSS.

Task Equipment Assignments

During the equipment identification process, SMEs were provided with a description of the intended operational capability of the FRSS and instructed to select supplies consistent with the system's concept of employment. Specifically, the FRSS will perform life- and limb-saving procedures with a reduced logistical footprint relative to today's surgical assets. Equipment sets will be configured to sustain a total of 18 patients over a 72-hour period including pre-operative trauma management for four patients simultaneously, a single surgical field, and holding capability for an additional four post-operative patients. The FRSS will be staffed with a ten person critical care team under the direction of one general surgeon and one anesthesiologist.

General operating room equipment was the first set of items selected for inclusion in the FRSS. These pieces of gear set the parameters of care and acted as the framework upon which the remaining capability was constructed. Each of these pieces of gear, listed in Appendix B, was selected as a primary tool required to achieve the surgical objectives identified in the treatment profiles. Included within this set of materiel are the surgical table, electrosurgical apparatus, defibrillator, and suction machine. Absent from this list of gear is the surgical irrigator. For the FRSS, a new, lighter, more versatile irrigation system was identified. In contrast to the current irrigators, the new system is disposable and therefore, is not listed with the equipment sets. Also, absent from the general operating room equipment is the traditional autoclave sterilization system. SMEs determined that hot sterilization was not logistically supportable in an FRSS environment. An alternative to hot sterilization, identified by the JRCAB, was selected for the FRSS. The new system consists of a rinse in an enzymatic solution to remove gross contaminants, and a secondary soak in a disinfectant solution currently undergoing certification by the FDA.

Next, SMEs identified the surgical instrument sets required to achieve the system's objectives. Using the previously described disinfection process, the SMEs determined that seven sets of instrumentation would provide continuous operational capability. The seven sets, listed in Appendix B, included three basic major sets, three extremity sets, and one burr hole set.

The final equipment set identified for the operating room was for anesthesia. Two approaches to anesthesia were identified in the treatment profiles. These were general anesthesia, provided by the drawover method, and regional blocks. Appendix B lists the materiel selected to support these functions.

Once the primary operating room equipment had been identified, SMEs then examined the remaining FRSS tasks and assigned the required supplies. The FRSS tasks and their equipment requirements are listed in Appendix C. During this process, SMEs followed the same concept of employment criteria. Therefore, the equipment assignments for the remaining tasks support a capability of 18 total patients in a configuration of four triage/pre-operative patient positions and four post-operative patient holding positions. At the conclusion of this process, the clinical requirement for each piece of equipment proposed for the FRSS had been established. The supply capability of the FRSS was designed to stand alone and would not be dependent upon a BAS for equipment support. Therefore, the equipment capability designed for the FRSS should be considered the maximum required to support the mission as defined in the concept of employment provided to the SMEs. For example, much of the trauma management gear selected to support FRSS pre-operative trauma management is currently stocked in the BAS Authorized Medical Allowance List (AMALs). These AMALs have been designed to support all casualties arriving at level 1-B facilities. Therefore, the current BAS is fully stocked to treat the full level one patient stream including those that may now be directed to the FRSS for treatment.

Task Consumable Assignments

Once SMEs had concluded identifying equipment requirements, the consumables required to support the selected equipment were assigned to the FRSS tasks. SMEs were provided with the same concept of employment criteria used during the equipment identification process. Supply assignments were made for each task in each functional area of the facility. This process established the clinical requirement for each consumable proposed for the FRSS. Where feasible, materiel requirements were minimized by identifying items capable of performing multiple clinical procedures. For example, sodium chloride irrigation was eliminated by identifying a surgical irrigation system that accepted the same 1000-ml bags of intravenous solution used for volume resuscitation. The FRSS tasks and their consumable item assignments are shown in Appendix C. It should be noted when reading Appendix C that the supply assignments are quite variable and their association to the tasks are more complex than would at first appear. That is to say that a single task may have different supply assignments and quantities required for each PC in the model. For example, *Task 14, Administer Appropriate Medications*, lists each medication administered at the FRSS. What is not readily apparent is that the medication supply assignments are different for each PC as well as different depending on which functional area of the facility they are being administered. The same holds true for the quantity of each medication administered. Because the model uses a unique treatment profile for each PC in each functional area, these subtleties are captured.

Final Equipment Projections

With the task assignments completed, the equipment portion of the FRSS could be projected. Each piece of equipment was extracted from the task assignments and listed by National Stock Number (NSN), nomenclature, quantity, unit of issue, item weight, and item cube. Weight and cube estimates were then derived by multiplying the quantity of each item by the appropriate weight and cube and then summing the totals. The total number of unique equipment items required to serve the FRSS was 111. The final weight of all FRSS equipment was 711.5 pounds,

and the volume was 40.7 cubic feet. Appendix D lists each individual equipment item, the number of each required, weight, and cube.

Final Consumable Projections

Completion of the task assignments also permitted projection of FRSS consumable requirements. Because consumable items are, by definition, patient-driven, the amount of each required is highly dependent on the characteristics of the patient stream. Therefore, advanced knowledge of casualty characteristics allows projection of a supply set that is uniquely tailored to the number and type of casualties anticipated. In the present study, the types of PCs expected in theater were identified. The specific medical tasks associated with the care of each of these were assigned as were the supplies needed to administer those tasks. Knowledge of the tasks and supplies required to treat each of the PCs provided sufficient data to project a tailored consumable supply stream when the number of each PC anticipated is projected.

To generate FRSS consumable requirements, a computer program was written that took into account each element of the model. The probability that each FRSS candidate PC would occur, extracted from the PATGEN model, was multiplied by the number of patients the FRSS was projected to treat (18). This resulted in new probabilities for each PC reflected as rescaled mean values. The resulting values were then multiplied by the tasks to be conducted for each PC to yield the total number of tasks required to treat the projected casualty load. The tasks were then adjusted to reflect the percentage of patients receiving each and the number of times each task was expected to be performed. From the task output, the consumable supplies and the required quantities were derived by multiplying the adjusted task frequencies by the task supply requirements estimated by the SMEs. This process produced the consumable requirements for an 18-patient FRSS. Once the consumable requirements had been determined, the individual items were packaged according to their assigned unit of issue.

After the model was run, each consumable item was listed by NSN, nomenclature, quantity, unit of issue, item weight, and item cube. Weight and cube estimates were then derived by multiplying the quantity of each item by the appropriate weight and cube and then summing the totals. The total number of unique consumable items required to serve the FRSS was 166. The final weight of all FRSS consumables combined totaled 663.5 pounds, and the volume totaled 61.8 cubic feet. Appendix E lists each individual consumable item, the number of each required, weight, and cube.

The total number of items required, the weight, and the cube of the projected FRSS equipment requirements were summed with the total consumable requirements to yield the final supply requirements for the FRSS. These results are shown in Table 3.

Table 3
Final FRSS Medical Supply Requirements

	Number of Items	Weight	Cubic Volume
FRSS Equipment	111	711.5	40.7
FRSS Consumables	166	663.5	61.8
Total FRSS	277	1375.0	102.5

CONCLUSIONS

The results of the study showed that by establishing clinical requirements and clearly identifying the parameters of care, the mobility of surgical assets can be greatly enhanced. While not all clinical procedures traditionally conducted at Marine Corps surgical facilities can be conducted in this environment, the SMEs participating in the study generally agreed that the trade-offs in surgical care were reasonable and that the ability to clinically intervene sooner was considered of great importance. For example, significant weight and cube reductions were achieved with the implementation of the modified approach to instrument disinfection. Other savings were achieved by substituting automated patient vital sign monitoring with manual approaches, eliminating radiology, and using medications that are not dependent upon refrigeration.

It is recognized that many FRS procedures do not lend themselves to modification. Placing a chest tube, creating a surgical airway, or performing a burr hole require a certain minimum amount of materiel. The materiel required to perform such tasks cannot be lessened. In response to these types of tasks, the SMEs identified new technology that permitted the same level of care to be provided with reduced weight and cube. For example, hypothermia is a major concern in the FRS environment and has serious implications for morbidity. Because traditional approaches to patient warming are bulky and power intensive, a new lightweight technology that permits faster core warming to occur has been introduced to Marine Corps medicine. Rapidly applied arterial shunts and pulse oximeters the size of wristwatches have also been introduced to lessen the logistical burden without negatively impacting patient care.

The final weight and cube estimates yielded by the study were somewhat higher than anticipated. A number of explanations are provided for this outcome. First, SMEs had a natural tendency to slightly overestimate the supply requirements to conduct procedures. Ostensibly, this was done to ensure the most difficult cases were adequately addressed. Taken as a single event, slight overestimates exert a negligible effect. Repeated many times over, as would be the case when simulating a clinical environment, the effect increases significantly. Second, the items selected for the FRSS were taken from the current Marine Corps inventory wherever feasible. Traditionally, military package sizes are large. Therefore, the FRSS has packages of items that often exceed the requirements projected by the model. For example, benzoin swabs come in packages of 500, some surgical sponges in packages of 600, and stethoscope adhesive pads in boxes of 612. Lessening this effect is simple. Identify smaller package sizes. As missions become smaller and lighter, the time may have come to reevaluate this issue Marine Corps-wide. Another effect that tended to increase the size of the FRSS was pre-operative trauma management. Most of this materiel is also stocked in the BAS AMALs and is sized to address the same patients now being directed to the FRSS. This results in an in-theater supply set exactly twice as large as it needs to be. The 18 litters stocked in the FRSS illustrate this point. Their total weight is 198 pounds. Even though the litters were selected on the merits of weight and size, they alone represented 28.3% of the weight of all FRSS equipment combined. On the plus side, the FRSS can go anywhere, at anytime and successfully perform its intended mission. On the downside, it is not known if the FRSS will need to operate in this fashion.

Slightly higher than expected estimates do not lessen the potential of the FRSS concept. Never before have Marine Corps medical personnel been able to do so much with so little. Because care

may be positioned closer than ever to the point of injury, the potential for improving clinical outcomes exists.

Maximizing the utility of the FRSS will require that it become part of the clinical training program. Because it was necessary to introduce new clinical approaches to achieve the required mobility, practitioners will need to become familiar with how the system works. As experience is gained with the system, some of the new concepts introduced may be transitioned to the current surgical company, thereby reducing some of the training requirements unique to the FRSS.

The methodology used in the current study was designed to support the examination of multiple facets of the Marine Corps field medical system. It is structured modularly, which provides flexibility in adding or reducing capabilities when projecting the effect of a change in the system is desired. With regard to the FRSS, this flexibility permits the examination of additional issues to determine their effect on providing field medical care. For example, it may be prudent to determine the required number of FRSSs needed to support missions of various sizes, where to place them to realize the optimal benefit, or how variations in evacuation times affect patient throughput. In this era of scarce resources and reduced budgets, it becomes important to leverage the value of materiel assets. In this regard, as the shelter concepts to house the FRSS are developed, they may have utility in other missions such as a BAS, a mobile sick call, staging a preventive medicine capability, or in providing civilian care during military missions other than war. These questions can be answered by programming factors into the model that are descriptive of the issues under investigation.

The results of the current study demonstrate the feasibility of fielding an FRSS. The weight and cube of the required supplies to support an FRS capability can be reduced to satisfy emerging mobility requirements. Therefore, the next step, should be the validation of the FRSS concept using the medical materiel selected by the SMEs. Testing and evaluation should occur in a field setting where clinicians can interact with patients, the materiel, and the structure of the facility to measure its effectiveness in performing the intended mission. The FRSS should be tested in a variety of configurations, such as in a stand-alone mode, as an augmentation to a BAS, or as a Shock Trauma Platoon associated with a surgical company. Furthermore, this process will provide insight to issues such as identifying the ideal mix of clinical specialties to support the concept, establishing training criteria, and measuring provider satisfaction with field expedient surgery.

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Appendix A

FRSS Patient Conditions

PC	Patient Condition Description
5	Cerebral contusion closed large intracranial hematoma w/without nondepressed skull fracture-severe-rapidly deteriorating comatose patient
6	Cerebral contusion closed with nondepressed linear skull fracture severe-loss of consciousness > 24 hours with/without focal neurological deficit
17	Wound face jaws and neck open lacerated with assoc. fractures excluding spinal fractures severe-w/airway obstruction
19	Wound face & neck open lacerated contused w/o fractures severe-w/airway obstruction and/or major vessel involvement
45	Wound upper arm open penetrating lacerated without fracture severe - with nerve and/or vascular injury
47	Wound upper arm open with fractures and nerve and vascular injury arm nonsalvageable
53	Wound forearm open lacerated penetrating with fracture and with nerve and vascular injury forearm not salvageable
54	Wound forearm open lacerated penetrating with fracture and with nerve and vascular injury forearm salvageable
61	Crush injury upper extremity severe - limb not salvageable
70	Amputation forearm traumatic complete all cases
71	Amputation full arm traumatic complete all cases
98	Wound liver closed acute (crush fracture) major liver damage
99	Wound liver closed acute (crush fracture) minor liver damage
100	Wound spleen closed acute (crush fracture) all cases
103	Wound abdominal cavity open with penetrating perforating wound of liver major damage
104	Wound abdominal cavity open with penetrating perforating abdominal wound with lacerated liver
105	Wound abdominal cavity open with penetrating perforating wound of spleen
106	Wound abdominal cavity open with lacerated penetrated perforated wound with shattered kidney
107	Wound abdominal cavity open with lacerated penetrating perforating wound with lacerated kidney initially repaired but subsequent nephrectomy
108	Wound penetration of pelvis with severe organ damage
114	Wound abdomen open w/pelvic fracture & penetrating perforating wounds to multiple pelvic structures (male or female)
123	Wound thigh open lacerated penetrating perforating with fracture and nerve/vascular injury limb not salvageable
124	Wound thigh open lacerated penetrating perforating with fracture and nerve and/or vascular injury limb salvageable
130	Wound lower leg open lacerated penetrating perforating with fracture and nerve/vascular injury limb not salvageable
131	Wound lower leg open lacerated penetrating perforating with fracture and nerve and/or vascular injury limb salvageable
136	Wound ankle foot toes open penetrating perforating with fractures and nerve/vascular injury limb not salvageable
137	Wound ankle foot toes open penetrating perforating with fractures and nerve and/or vascular injury limb salvageable
138	Crush injury lower extremity limb not salvageable
139	Crush injury lower extremity limb salvageable
145	Amputation below knee traumatic complete all cases
147	Amputation above knee traumatic complete
159	MIW brain and chest with sucking chest wound and pneumothorax
160	MIW brain and abdomen with penetrating perforating wound colon
161	MIW brain and abdomen with penetrating perforating wound kidney
162	MIW brain and abdomen with penetrating perforating wound bladder
163	MIW brain and abdomen with shock and penetrating perforating wound spleen
164	MIW brain and abdomen with shock and penetrating perforating wound liver
165	MIW brain and lower limbs requiring bilateral above knee amputations
166	MIW chest with pneumothorax and abdomen with penetrating wound colon

Appendix A
FRSS Patient Conditions

PC	Patient Condition Description
167	MIW chest with pneumothorax and abdomen with penetrating perforating wound kidney bladder
168	MIW chest with pneumothorax and abdomen with perforating wound bladder
169	MIW chest with pneumothorax and abdomen with penetrating perforating wound spleen
170	MIW chest with pneumothorax and abdomen with penetrating perforating wound liver
171	MIW chest with pneumothorax and limbs with fracture and vascular injury
172	MIW abdomen with penetrating perforating wound of colon and bladder
173	MIW abdomen with penetrating perforating wound of colon and spleen
174	MIW abdomen with penetrating perforating wound of colon and liver
175	MIW abdomen & limbs w/penetrated perforated colon & open fracture & neurovascular injury of salvageable lower limb
176	MIW abdomen and pelvis with penetrating perforating wound of liver and kidney
177	MIW abdomen and pelvis with penetrating perforating wounds of spleen and bladder
178	MIW abdomen pelvis limbs with fracture and neurovascular injury limb salvageable and penetrating wound kidney
179	MIW abdomen pelvis limbs without fracture or neurovascular injury and penetrating perforating wound bladder
180	MIW abdomen & lower limbs w/fracture & nerve injury w/penetrating wound spleen w/full thickness burns TBSA>20%
181	MIW abdomen and limbs without fracture or nerve injury with penetrating wound of liver
182	MIW chest with pneumothorax soft tissue injury to upper limbs and penetrating wound of brain
183	MIW chest with pneumothorax soft tissue injury to upper limbs and abdomen with wound of colon
184	MIW chest with pneumothorax pelvis and abdomen with wound of colon and bladder
185	MIW abdomen and chest with multiple organ damage
313	Wound abdominal cavity open with lacerated penetrating perforating wound kidney moderate - kidney salvageable

Appendix B

Operating Room Equipment & Instrument Sets

Basic Operating Room Equipment

NSN	Nomenclature	Quantity	UM
6530014588301	Basin Wash 7 Quart Sterilizable Fits Stand Plas Durable	2	EA
6515014594417	Battery Pack Defibrillator use w/Defibrillator Automatic External	1	EA
NSN PENDING	Blood/Intravenous Fluid Warmer 10 Unit Capacity	1	EA
65000140091	Cable Assembly Power Elect 2-Conductor 12'	4	EA
6515011742406	Defibrillator Monitor-Recorder Battery-p Portable w/Override	1	EA
6515012066017	Electrosurgical Apparatus Mobile 115/230V 50/60Hz AC	2	EA
6515014553888	Lantern Electric Head Mount Halogen & Krypton Bulb Battery	4	EA
6515014553885	Lens Red Lantern Electric Head Mount	4	EA
6515011841235	Light Head Fiber Optic Adjust Spot Coaxial 5mm Sheath	2	EA
8405008893683	Liner Wet Weather Poncho	18	EA
NSN PENDING	Pail Utility CRS Plastic Surgical Operation Room 12 Qt	1	EA
411001277111	Refrigerator Solid State Mechanical Blood 110/220V 50/60HZ	1	EA
6530008902025	Stand Basin Folding Front Single Aluminum w/Case	1	EA
6515011725211	Stethoscope Electronic Non-Invasive Portable Doppler Battery Op	1	EA
6515014350050	Suction & Pressure Apparatus Surgical Port 115/230V 50/60Hz AC	1	EA
6530013215592	Table Operating Room Field w/Arm Boards Mayo Instr Tray	1	EA

Basic Major Instrument Set (x3 sets)

NSN	Nomenclature	Quantity	UM
6515006903212	Clamp Artery Debakey-Bahson Curved & Serrated 65mm Jaw CRS	2	EA
6515008901682	Clamp Artery Glover Bulldog 6.5Cm Curved Serrated 27MM	2	EA
6515003669200	Forceps Bone Cutting Bethune Style 13.5Inches Long	1	EA
6515003333700	Forceps Dressing 10" Straight & Serrated Jam Edge Round Tip	1	EA
6515003341400	Forceps Gall Duct Lahey Curved 7.5" Box Lock Joint	2	EA
6515003373900	Forceps Gauze Pad Holding Foerster 9-9.75" Straight	2	EA
6515003347500	Forceps Hemostatic Rochester-Ochsner Str 7.25"	2	EA
6515003382900	Forceps Hemostatic Schmidt 7.25" Crvd Serr Jaw Tonsil	2	EA
6515000653181	Forceps Hemostatic Mixer Half-Curved 6.87-7.5"	2	EA
6515003344900	Forceps Hemostatic Halsted Mosquito Pt 4.75-5.25" CRS	2	EA
6515003343800	Forceps Hemostatic Kelly 5.25-5.75" Slightly Curved	8	EA
6515003344100	Forceps Hemostatic Mayo-Carmalt 7.75-8.25" O/A Lg CRS	2	EA
6515003349500	Forceps Hemostatic Pean Slightly Curved Jaw 9"	2	EA
6515003344300	Forceps Hemostatic Rochester-Pean 6-6.5"	8	EA
6515010489066	Forceps Hemostatic Storz-Storey Rightt Angle 8.75" 52MM CRS	2	EA
6515011398167	Forceps Intestinal Angular Glassman Noncrushing 9 IN LG	2	EA
6515003352900	Forceps Intestinal Babcock 7.75 Inch Long Box Lock CRS	4	EA
6515003351900	Forceps Intestinal Doyen 8.75" Box Lock Joint CRS	2	EA
6515003355800	Forceps Tissue 5.5 Inches Long Tweezer Straight & Serrated Edge	2	EA
6515003380300	Forceps Tissue Allis 6 Inches Pivoted Straight & Smooth Jaw	2	EA
6515006903208	Forceps Tissue Debakey 7.75" Tweezer Straight & Serrated Edges	2	EA
6515006903209	Forceps Tissue Debakey 9.5" Tweezer Straight & Serrated	2	EA
6515012983857	Forceps Tissue Ferris-Smith Tweezer 7" w/1x2 Teeth	1	EA
6515003204600	Forceps Towel Backhaus 5.25" Opposed Prongs	8	EA
6515011417469	Handle Surg Knife Detach Blade Size 3L	1	EA
6515003447800	Handle Surg Knife Detach Blade Size 3 Narrow Nose	1	EA
6515006903200	Holder Suture Needle Debakey 9" Serrated & Straight Edges	2	EA
6515002998737	Holder Suture Needle Hegar-Mayo 7" Serr Tungsten	2	EA
6515010457158	Knife Sternum Lebscee Design 10 Inches Long Passivated	1	EA
6515012340253	Mallet Bone Surgery Corrosion Resisting Steel 7.5-IN LG	1	EA

Appendix B

Operating Room Equipment & Instrument Sets

Basic Major Instrument Set (x3 sets) cont.

NSN	Nomenclature	Quantity	UM
6515011398969	Retractor Abdominal Balfour/Codman-Shurtleff 2.5x3.25"	1	EA
6515003603510	Retractor Abdominal Deaver 1.5" Blade 12" Single End	1	EA
6515003603530	Retractor Abdominal Deaver Single End 12x2 Inches Long	1	EA
6515011398407	Retractor Abdominal Richardson 9 1/8" Blade	2	EA
6515011398196	Retractor General Operating Harrington 13x2.25" Curved Right	1	EA
6515009269193	Retractor Mastoid Weitlaner 6.5" Hook Unit 3 vs 4	2	EA
6515011346649	Retractor Rib Burford-Finocchio Fenestrated Detachable	1	EA
6515003603850	Retractor Set Abdominal Richardson-Eastman	1	EA
6515006647853	Retractor Set General Operating Double End 1.5X13 Inch Blades CRS	1	EA
6515003609200	Retractor Set General Operating Surgical Rigid 8.5 IN LG CRS	1	SE
6515003620200	Retractor Vein Cushing 8.5" Corrosion Resisting Steel	2	EA
6515010895668	Scissors General Operating Surgical Metzenbaum Delicate Dissecting	1	EA
6515003640520	Scissors General Operating Surgical Mayo 6.5-7 IN LG Curved Blade	2	EA
6515003657100	Scissors Tonsil Metzenbaum 7 Inches Long Curved Blade Blunt Point	2	EA
6530007940000	Tray Instrument Rectangle 15.5 x 9.5 x 2 IN Type II Size 3 CRS	1	EA

Extremity Instrument Set (x3 sets)

NSN	Nomenclature	Quantity	UM
6515003866800	Cannula Brain Frazier 8Fr 7.5" Open End Tip CRS	1	EA
6515008901682	Clamp Artery Glover Bulldog 6.5CM Curved & Serrated 27MM	2	EA
6515003280700	Elevator Periosteal 7.75 Inches Long Curved Blade CRS	1	EA
6515003279400	Elevator Set Periosteal Doyen Curved Blunt Edge Large	1	EA
6515003301300	File Bone 10.5 Inche Long Blade Straight and Serrated Edges Coarse	1	EA
6515003352900	Forceps Intestinal Babcock 7.75" Str Box Lock	2	EA
6515003347400	Forceps Hemostatic Rochester-Ochsner 1.5-1.75IN LG Straight Jaw	2	EA
6515003344900	Forceps Hemostatic Halsted Mosquito Point 4.75-5.25 IN LG	2	EA
6515003343800	Forceps Hemostatic Kelly 5.25 - 5.75 Inches Long Slightly Curved	6	EA
6515003344300	Forceps Hemostatic Rochester-Pean 6-6.5 IN LG CRS	4	EA
6515003377800	Forceps Tissue Adson 4.5 IN LG Tweezer Straight & Smooth Jaw	2	EA
6515003380300	Forceps Tissue Allis 6 Inch Long Pivoted Straight & Smooth Jaw	2	EA
6515006903208	Forceps Tissue Debakey 7.75 IN LG Tweezer Straight & Serrated	2	EA
6515003204600	Forceps Towel Backhaus 5.25" Opposed Prongs	4	EA
6515003632400	Handle Bone Cutting Wire Saw Gigli Oval Corrosion Resisiting Steel	2	EA
6515003447800	Handle Surgical Knife Detachable Blade Size 3	2	EA
6515003417200	Holder Suture Needle Collier 5" Straight Jaw Box Lock Type	2	EA
6515002998737	Holder Suture Needle Hegar-Mayo 7" Serrated Tungsten Steel	2	EA
6515011190018	Probe General Operating Bulbous Tip 5 Inches Long CRS	1	EA
6515009269193	Retractor Mastoid Weitlaner 6.5" Hook Unit 3 vs 4	2	EA
6515003609200	Retractor Set General Operating Rigid Double End	1	SE
6515003618980	Retractor Tracheal Hupp CRS Sharp Blade Point 3-Prong	2	EA
6515003620200	Retractor Vein Cushing 8.5 Inches Long Corrosion Resisting Steel	2	EA
6515003640520	Scissors General Operating Surgical Mayo 6.5-7 IN LG Curved Blade	1	EA
6515003656200	Scissors Tenotomy Stevens 4-4.5 Inches Long Curved Blade	1	EA
6515003657100	Scissors Tonsil Metzenbaum 7 Inches Long Curved Blade Blunt Point	1	EA
6530007939945	Tray Instrument Rectangle 10.5 x 8 x 2 IN Type II CRS	1	EA

Appendix B

Operating Room Equipment & Instrument Sets

Burr Hole Set (x1 set)

NSN	Nomenclature	Quantity	UM
6515005152113	Brace Bit Bone Hudson 9.75 Inches Long Snap-Lock Passivated	1	EA
6515003124125	Burr Cranial Hudson 14MM Dia 3.812 IN LG 6 Flute Truncated	1	EA
6515005122115	Burr Cranial Hudson 16MM Dia 3.812 Inches Long Ball Head 8 Flute	1	EA
6515003124130	Burr Cranial Hudson 20MM Dia 3.812 Inches Long Ball Head 8 Flute	1	EA
6515005152114	Burr Cranial Hudson 9MM Dia 4.094 Inches Long Flame Head 6 Flute	1	EA
6515003866800	Cannula Brain Frazier 8 French 7.5 Inches Long Open Ended Tip CRS	2	EA

Anesthesia Equipment Set (x2 sets)

NSN	Nomenclature	Quantity	UM
6515014604685	Blade Laryngoscope Adult Macintosh Number 3 Plastic Durable	1	EA
6515014604672	Blade Laryngoscope Adult Macintosh Number 4 Plastic Durable	1	EA
6515014604681	Blade Laryngoscope Adult Miller Number 3 Plastic Disposable	1	EA
6515013724470	Blood & Fluid Warmer 110/220V 50/60HZ AC	1	EA
6515003323300	Forceps Tracheal Tube Magill Fenestrated & Serrated Adjustable	1	EA
6515012808163	Infusor Pressure Blood Collecting-Dispensing Bag Rubber 1000ML	2	EA
6515013448487	Injector Tube Plastic Reusable Accommodates 1ML & 2ML Cartridges	1	EA
6515014509790	Laryngoscope Set Including Handle, Basic ENT Light, Mac 3.5	1	SE
6515014509790	Mask Airway Laryngeal Reusable Silicone Size 4 19 CM	1	EA
6515014660971	Oximeter Pulse Finger Clip Battery Powered Nonin Brand	1	EA
6515012045394	Resuscitator Hand-Operated Small & Medium Adult Face Masks	1	EA
6515010394884	Sphygmomanometer Aneroid 300mm Max Calibration	1	EA
6515013146694	Stethoscope Combination Littman Classic II 28"	1	EA
NSN PENDING	Stimulator Nerve High/Low Amperage Port Lightweight	1	EA
6515013556479	Vaporizer Anesthesia Drawover Multiple 85ML Liquid Agent	1	EA
6530014640267	Ventilator Volume Portable 8.8X5IN UniVent 110/120V AC	1	EA

Appendix C

FRSS Clinical Task & Supply Assignments

TASK 001: TRIAGE¹

NSN	Nomenclature	Amount	UM
7210009356666	Blanket Casualty Plastic Film Alum Coated 96x56" Green	1	EA
7530002223527	Book Record 14x8.5IN Lined 288 Pages	1	PG
6530014325114	Litter Rigid Folding Polypropolene Cover Raven	1	EA
8465013376792	Tag ID Personnel Cardboard Field Triage	2	EA

TASK 002: ASSESSMENT & EVALUATION OF PATIENT STATUS¹

NSN	Nomenclature	Amount	UM
6135009857845	Battery Nonrechargeable 1.5Volt Size AA 24S	.05	EA
6135008264798	Battery Nonrechargeable 1.5 Volt Size AAA 24S	.05	EA
6545014586179	Otoscope & Ophthalmoscope Field Deluxe	1	EA

TASK 006: ESTABLISH ADEQUATE AIRWAY¹

NSN	Nomenclature	Amount	UM
6515011676637	Airway Nasopharyngeal 6x8mm Smooth Rd Edges Plas Disp	1	EA
6515011649637	Airway Pharyngeal 4" Airway/Cutaway Flange Kink Res 30FR 100mm	1	EA

TASK 007: EMERGENCY CRICOTHYROIDOTOMY

NSN	Nomenclature	Amount	UM
6515013215211	Airway Kit Percutaneous Emer Adult Ster Disp	1	EA
6515012522484	Gloves Surgeon General Rubber Powder-Free Size 8.0 50S	1	PR
6515012534260	Gloves Surgeon General Rubber Powder-Free Size 7.5 50S	1	PR
6515012611137	Gloves Surgeon General Rubber Powder-Free Size 7.0 50S	1	PR
6540012901157	Goggles Protective Clear Distortion Free Lens 50S	1	PR
6510007863736	Pad Isopropyl Alcohol Impregnated 100S	2	EA
6510002940009	Sponge Surgical Guaze Sterile 6.75x6IN 5 Sponges per Envelope 600S	0.5	EN
6510009268883	Tape Adhesive Surgical Porous White Woven Hypoallergenic 2Inx10YD	0.25	RL

TASK 010: NEUROLOGICAL ASSESSMENT

NSN	Nomenclature	Amount	UM
6135009857845	Battery Nonrechargeable 1.5Volt Size AA 24S	.05	EA
6135008264798	Battery Nonrechargeable 1.5 Volt Size AAA 24S	.05	EA
6545014586179	Otoscope & Ophthalmoscope Field Deluxe	1	EA

TASK 011: STABILIZE NECK (COLLAR/SPINE BOARD)¹

NSN	Nomenclature	Amount	UM
6515013637700	Board Spinal Folding Heavy Gauge Aluminum with Handles Holds	1	EA
6515014663001	Support Cervical Plastic Universal Size 30S	1	EA

TASK 017: SUCTION (ORAL/TRACH/ENDO)^{1,3}

NSN	Nomenclature	Amount	UM
6515011067648	Canister Assembly Suction Apparatus Surgical Durable 1500CC Capacity	0.05	EA
6515010726380	Cannula Laryngeal Yankaurer Design 72IN LB Clear 20S	1	EA

¹The required *supplies* vary depending on PC

²The required *amounts* vary depending on PC

³The required *supplies* vary depending on functional area

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FRSS Clinical Task & Supply Assignments

TASK 017: SUCTION (ORAL/TRACH/ENDO)^{1,3} (cont.)

NSN	Nomenclature	Amount	UM
6515004588411	Catheter & Connector Suction Trach 14FR Whistle Tip 2 Eyes Max	1	EA
6515009269201	Connector Tubing Suction Tapered Male Ends 50S	0.10	EA
6515014350050	Suction Apparatus Oropharyngeal 120/230 V 50/60 Hz AC Prtble Btry	1	EA
6515011676666	Suction Set Tracheal 14 French 22IN Long	1	EA
6515012774772	Tubing Surgical Plastic Bulbous 5MM ID 100FT	0.05	FT

TASK 019: EMERGENCY CONTROL OF HEMORRHAGE^{1, 2}

NSN	Nomenclature	Amount ²	UM
6510001055807	Bandage Elastic Coban Brn 3" x 5YD	1-4	RL
6510000583047	Bandage Gauze 6-Ply Rolled White Sterile 4.5" x 4YD 100S.	1-5	RL
6510014575844	Dressing Burn First-Aid Water-Gel	4	EA
6510014081920	Dressing Chest Wound Seal	1	EA
6510002017430	Dressing First Aid Field Brown Camouflaged 7.75-8.25" L 7.25-7.85" W	1-5	EA
6510000835573	Dressing First Aid Field White 6.25-7.25" L 4"W Absorbent Pleated	1-5	EA
6510002940009	Sponge Surgical Guaze Sterile 6.75x6IN 5 Sponges per Envelope 600S	1-2	EN
6510009268883	Tape Adhesive Surgical White Porous Woven 2" x 10YD 6S	0.5	RL

TASK 024: VITAL SIGNS

NSN	Nomenclature	Amount	UM
6515010394884	Sphygmomanometer Aneroid 300mm Max Calibration w/Clip for Cuff	1	EA
6515013146694	Stethoscope Combination Littman Classic II 28IN LG Bell Diaphragm	1	EA

TASK 032: SET UP PULSE OXIMETER

NSN	Nomenclature	Amount	UM
6135009857845	Battery Nonrechargeable 1.5Volt Size AA 24S	.05	EA
6515014660971	Oximeter Pulse Finger Clip Battery Powered Nonin Brand	1	EA

TASK 038: MAINTAIN ON VENTILATOR

NSN	Nomenclature	Amount	UM
6530014551653	Ventilator Volume Portable 8.87x11.5 IN	1	EA

TASK 044: SET UP DRAINAGE BOTTLES/PLEUREVAC

NSN	Nomenclature	Amount	UM
6515010587450	Drainage Unit Pleural Cavity Plastic Disp Water Seal 3 Chamber 2300ML	1	EA

TASK 046: CONDUCT CHEST TUBE SUCTION

NSN	Nomenclature	Amount	UM
6515011067648	Canister Assembly Suction Apparatus Surgical Durable 1500CC Capacity	0.05	EA
6515014350050	Suction Apparatus Oropharyngeal 120/230 V 50/60 Hz AC Prtble Btry	1	EA
6515012774772	Tubing Surgical Plastic Bulbous 5MM ID 100FT	0.05	FT

¹The required *supplies* vary depending on PC

²The required *amounts* vary depending on PC

³The required *supplies* vary depending on functional area

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FRSS Clinical Task & Supply Assignments

TASK 049: START/CHANGE IV INFUSION SITE^{1, 2}

NSN	Nomenclature	Amount ²	UM
6515013909654	Catheter & Needle Unit IV 18GA 1.25" Protecto-Cath Design 200S	1-2	EA
6515013909627	Catheter & Needle Unit IV 14GA 1.25" Protecto-Cath Design 200S	1	EA
6515012808163	Infusor Pressure Blood Intravenous Color Coded 1000ML	1	EA
6515011050614	Intravenous Inj Set Vented 15 Drops/ml 78" L Ster Disp	1-2	EA
6510007863736	Pad Isopropyl Alcohol Impregnated Nonwvn Cotton/Rayon 1.5-2.6x1.8-2"	1-2	EA
6510009268883	Tape Adhesive Surgical White Porous Woven 2" x 10YD	0.15	RL

TASK 050: ADMINISTER IV INFUSION²

NSN	Nomenclature	Amount	UM
4020011111766	Cord Traction Braided Fibrous Plastic Polyester Braided 100FT	4	FT
6505013306269	Sodium Chloride Injection USP 0.9% 1000ML Bags 12S	1000	ML

TASK 062: IV INFUSION BLOOD PRODUCTS²

NSN	Nomenclature	Amount	UM
	Blood Packed RBCs	1-2	UN
6515011281407	Blood Recipient Set Indirect Transfusion Y Type Nontoxic 48S	1	EA

TASK 065: INSERT CENTRAL VENOUS/LARGE BORE ACCESS

NSN	Nomenclature	Amount	UM
6515013909654	Catheter & Needle Unit IV 18GA 1.25" Protecto-Cath Design 200S	1	EA
6515013909627	Catheter & Needle Unit IV 14GA 1.25" Protecto-Cath Design 200S	1	EA
6515012522484	Gloves Surgeon General Rubber Powder-Free Size 8.0 50S	1	PR
6515012534260	Gloves Surgeon General Rubber Powder-Free Size 7.5 50S	1	PR
6515012611137	Gloves Surgeon General Rubber Powder-Free Size 7.0 50S	1	PR
6515011050614	Intravenous Inj Set Vented 15 Drops/ml 78" L Ster Disp	1	EA
6515012738647	Introducer Set Catheter Percutaneous 4 Comp 20CM LG 13CM Sheath	1	EA
6515013277257	Mask Shield Face Protective Female Opening	1	EA
6510010100307	Pad Povidone-Iodine Impregnated Sterile Cotton/Rayon 2x1.375" Brn	1	EA
6515013225898	Razor Surgical Preparation Disposable Plastic 100S	1	EA
6510002940009	Sponge Surgical Gauze Sterile 6.75x6IN 5 Sponges per Envelope 600S	1	EN
6515007344342	Suture Nonabsorb Sz 4-0 1 18" Strand C3 RVS Cutting Edge Nylon	1	EA
6515007540412	Syringe Hypodermic GP 10-12ml Cap Luer Slip w/o Ndl Concentric Tip	1	EA
6510009268883	Tape Adhesive Surgical Porous Woven Rolled Rubber 2" x 10YD 6S	0.25	RL

TASK 070: BOWEL SOUNDS ASSESS

NSN	Nomenclature	Amount	UM
6515013146694	Stethoscope Combination Littman Classic II 28IN LG Bell Diaphragm	1	EA

TASK 071: INSERT NG/OG TUBE

NSN	Nomenclature	Amount	UM
6505005843131	Lidocaine Hydrochloride Jelly USP 2% Tube 30ML	2	ML
6505001538809	Lubricant Surgical 4 OZ Tube	0.5	OZ
6510009268883	Tape Adhesive Surgical White Porous Woven 2" x 10YD	0.1	RL
6515001490316	Tube Stomach Surgical Plastic Salem E19 w/Funnel 16FR Dbl Lumen 48"	1	EA

¹The required *supplies* vary depending on PC

²The required *amounts* vary depending on PC

³The required *supplies* vary depending on functional area

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FRSS Clinical Task & Supply Assignments

TASK 073: CONDUCT NG/OG TUBE SUCTION

NSN	Nomenclature	Amount	UM
6515011067648	Canister Assembly Suction Apparatus Surgical Durable 1500CC Capacity	0.05	EA
6515014350050	Suction Apparatus Oropharyngeal 120/230 V 50/60 Hz AC Prtble Btry	1	EA
6515014570288	Syringe Irrigating 60ml Cap Piston Dbl Scale Surg Ster Disp	1	EA
6515012774772	Tubing Surgical Plastic Bulbous 5MM ID 100FT	0.05	FT

TASK 075: IRRIGATE NG/OG TUBE

NSN	Nomenclature	Amount	UM
6530014588301	Basin Wash7QT Sterilizable Plastic Fits Ring Stand Durable 12S	0.05	EA
6505013306269	Sodium Chloride Injection USP 0.9% 1000ML Bags 12S	100	ML
6515007540412	Syringe Hypodermic GP 10-12ml Cap Luer Slip w/o Ndl Concentric Tip	1	EA

TASK 079: CATHETERIZATION - FOLEY

NSN	Nomenclature	Amount	UM
6515001490104	Catheterization Kit Urethral w/Bot-Outlet Drain Bag 16FR Disp	0.75	EA
6505005843131	Lidocaine Hydrochloride Jelly USP 2% Tube 30ML	2	ML
6505001538809	Lubricant Surgical 4 OZ Tube	0.2	OZ

TASK 082: MEASURE/RECORD INTAKE/OUTPUT

NSN	Nomenclature	Amount	UM
7540005344122	SF 509 Chronological Record of Clinical Care	1	EA

TASK 084: SHAVE & PREP

NSN	Nomenclature	Amount	UM
6505001538809	Lubricant Surgical 4 OZ Tube	0.15	OZ
6515013225898	Razor Surgical Preparation Disposable Plastic 100S	0.50	EA
6515010503557	Skin Preparation Kit Pre-Operative Sterile 20s	0.50	EA
6510002940009	Sponge Surgical Gauze Sterile 6.75x6IN 5 Sponges per Envelope 600S	0.50	EN

TASK 093: EXTREMITY ELEVATION

NSN	Nomenclature	Amount	UM
721000298520	Pillow Pneumatic Cotton Rubber Khaki or Olive Drab 16.5x13IN	1	EA

TASK 098: APPLY SPLINT/IMMOBILIZE INJURY^{1, 2}

NSN	Nomenclature	Amount	UM
6510001055807	Bandage Elastic Coban Brn 3" x 5YD	1-2	RL
6515012254681	Splint Universal 36x4.5" Malleable Alum Radiolucent Ltwt Gray	1-2	EA
6510009268883	Tape Adhesive Surgical White Porous Woven 2"x10YD	0.5	RL
6515010764713	Trousers Pneumatic Anti-Shock Three Bladder	1	EA

TASK 103: CIRCULATION CHECK

NSN	Nomenclature	Amount	UM
6515013146694	Stethoscope Combination Littman Classic II 28IN LG Bell Diaphragm	1	EA

¹The required *supplies* vary depending on PC

²The required *amounts* vary depending on PC

³The required *supplies* vary depending on functional area

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FRSS Clinical Task & Supply Assignments

TASK 104: COMPARTMENT PRESSURE MEASUREMENT

NSN	Nomenclature	Amount	UM
	Measured Manually – No FRSS Supplies Used		

TASK 105: DOPPLER ASSESSMENT

NSN	Nomenclature	Amount	UM
6505001538809	Lubricant Surgical 4 OZ Tube	0.15	OZ
6515011929456	Ultrasound Unit Blood Flow Detection	1	EA

TASK 121: EYE IRRIGATION

NSN	Nomenclature	Amount	UM
6530014588301	Basin Wash7QT Sterilizable Plastic Fits Ring Stand Durable 12S	0.05	EA
6505013306269	Sodium Chloride Injection USP 0.9% 1000ML Bags 12S	500	ML
6505005824737	Tetracaine Hydrochloride Ophthalmic Solution 0.5% 15ML	1	ML

TASK 126: SEIZURE CARE/PRECAUTIONS

NSN	Nomenclature	Amount	UM
6510000583047	Bandage Gauze 6-Ply Rolled White Sterile 4.5" x 4YD IS (See Task 145 for seizure control medications)	3	RL

TASK 127: PERFORM PATIENT RESTRAINT

NSN	Nomenclature	Amount	UM
6510000583047	Bandage Gauze 6-Ply Rolled White Sterile 4.5" x 4YD IS	3	RL

TASK 145: ADMINISTER APPROPRIATE MEDICATION^{1, 2, 3}

NSN	Nomenclature	Amount ²	UM
6505002998179	Albumin Human USP 25% 100ML Can	1-2	CN
6505010100832	Cefazolin Sodium Sterile USP 1GM Vial	1-2	VI
6505011196005	Cefoxitan Sodium Sterile USP 1GM Vial 25S	1-2	VI
6505012192760	Ceftriaxone Sodium Sterile USP Powder Form 1GM Bottle	1-2	GM
6505001539740	Heparin Sodium Injection 1000 Units per ML 20ML Vial	1	VI
6505011253253	Mannitol Injection USP 25% 50ML Single Dose Vials 25S	3	VI
6505011080808	Methylpredisalone Sodium Succinate Injection USP 1000MG	4	CO
6505001490113	Morphine Sulfate Inj USP 10mg 1ml Cartridge-Needle Unit	1-4	EA
6505013329024	Phenytoin Sodium Inj USP 50mg/ml Vi 5ml	2	VI
6505006807352	Promethazine Hydrochloride Inj USP 25MG/ML 1ML Ampule	1-2	AM
6505005607331	Sulfadiazine Silver Cream 1% Topical 400GM Jar	200	GM
6515003245500	Depressor Tongue Wood 6x.75x.062" Straight	10	EA
6515013448487	Injector Tube Plas Reusable Accom 1ml & 2ml Medication Needle Cart	1	EA
6515011727650	Needle Hypodermic C13A GP 22GA 1.438-1.562" Luer Lock Reg Ster	1-8	EA
6515007542834	Needle Hypodermic C13A GP 18GA 1.185-1.312" Luer Lock Reg Ster	2-7	EA
6510007863736	Pad Isopropyl Alcohol Impregnated Nonwvn Cotton/Rayon 1.5-2.6x1.8-2"	1-8	EA
6515014123099	Syringe Hypodermic General Purpose 60ML 20S	3	EA
6515007540412	Syringe Hypodermic GP 10-12ml Cap Luer Slip w/o Ndl Concentric Tip	1-6	EA
6515004627348	Syringe Hypodermic General Purpose 3ML 100S	1-2	EA

TASK 149: BLOOD DRAWING VENOUS³

NSN	Nomenclature	Amount	UM
6515011727650	Needle Hypodermic C13A GP 22GA 1.438-1.562" Luer Lock Reg Ster	1	EA

¹The required *supplies* vary depending on PC

²The required *amounts* vary depending on PC

³The required *supplies* vary depending on functional area

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FRSS Clinical Task & Supply Assignments

TASK 149: BLOOD DRAWING VENOUS³ (cont.)

NSN	Nomenclature	Amount	UM
6510007863736	Pad Isopropyl Alcohol Impregnated Nonwvn Cotton/Rayon 1.5-2.6x1.8-2"	1	EA
6515007540412	Syringe Hypodermic GP 10-12ml Cap Luer Slip w/o Ndl Concentric Tip	1	EA
6515004627348	Syringe Hypodermic General Purpose 3ML 100S	1-2	EA
6515011885316	Tube Drainage Surgical Penrose 1x18IN	1	EA

TASK 191: GIVE A URINAL/BEDPAN

NSN	Nomenclature	Amount	UM
6530014617882	Bedpan Pontoon Style Stackable Corrosion Resisting Steel	1	EA

TASK 197: CHARTING & PAPERWORK^{2, 3}

NSN	Nomenclature	Amount	UM
7520002405503	Clipboard File 17x19IN Composite Board	1	EA
7530002815941	Folder Set File 11.75x9IN	0.25	EA
7540006344121	Form Print Clinical Record of Doctor's Orders 10.5x8IN 100S	0.5	EA
7540005344122	Standard Form 509 Chronological Record Clinical Care	0.5	EA

TASK 221: PERICARDIOCENTESIS

NSN	Nomenclature	Amount	UM
6515013909627	Catheter & Needle Unit IV 18GA 1.25" Protecto-Cath Design 200S	1	EA
6515012522484	Gloves Surgeon General Rubber Powder-Free Size 8.0 50S	1	PR
6515012534260	Gloves Surgeon General Rubber Powder-Free Size 7.5 50S	1	PR
6515012611137	Gloves Surgeon General Rubber Powder-Free Size 7.0 50S	1	PR
6540012901157	Goggles Protective Clear Distortion Free Lens 50S	1	PR
6510010100307	Pad Povidone-Iodine Impregnated Sterile Cotton/Rayon Brown	1	EA
6515013225898	Razor Surgical Preparation Disposable Plastic 100S	1	EA
6510002940009	Sponge Surgical Gauze Sterile 6.75x6IN 5 Sponges per Envelope 600S	1	EN
6515014123099	Syringe Hypodermic General Purpose 60ML 20S	1	EA
6510009268883	Tape Adhesive Surgical White Porous Woven 2"x10YD	0.1	RL

TASK 242: PERFORM BLADDER IRRIGATION

NSN	Nomenclature	Amount	UM
6530014588301	Basin Wash7QT Sterilizable Plastic Fits Ring Stand Durable 12S	0.05	EA
6515013648553	Glove Patient Exam/Treat Med Prepowdered Snug Fit Cuff Latex Ambid	2	EA
6515002267692	Glove Patient Exam/Treat LGE Prepowdered Snug Fit Cuff Latex Ambid	2	EA
6515012534260	Gloves Surgeon General Rubber Powder-Free Size 7.5 50S	1	PR
6515012611137	Gloves Surgeon General Rubber Powder-Free Size 7.0 50S	1	PR
6505013306269	Sodium Chloride Injection USP 0.9% 1000ML Bags 12S	500	ML
6510002940009	Sponge Surgical Gauze Sterile 6.75x6IN 5 Sponges per Envelope 600S	1	EN
6515014123101	Syringe Hypodermic Disp Ster 20ml Plastic I.S.	2	EA

TASK 344: PATIENT PREPARATION IN THE OPERATING ROOM

NSN	Nomenclature	Amount	UM
6515013225898	Razor Surgical Preparation Disposable Plastic 100S	0.50	EA
6515010503557	Skin Preparation Kit Pre-Operative Sterile 20s	0.50	EA

¹The required *supplies* vary depending on PC

²The required *amounts* vary depending on PC

³The required *supplies* vary depending on functional area

Appendix C

FRSS Clinical Task & Supply Assignments

TASK 351: OPERATING ROOM TEAM PREPARATION

NSN	Nomenclature	Amount	UM
6530011642727	Brush Surgical Scrub 3IN Shoe Handle w/Hexachlorophene Dispenser	1	EA
6532013277237	Cap Operating Surgical Bouffant Universal Size Disp 100S	4	EA
NSN PENDING	Cover Boots Surgical Operating Room Disp 25S	2	PR
6515013648553	Glove Patient Exam/Treat Med Prepowdered Snug Fit Cuff Latex Ambid	4	EA
6515012522484	Gloves Surgeon General Rubber Powder-Free Size 8.0 50S	2	PR
6515012534260	Gloves Surgeon General Rubber Powder-Free Size 7.5 50S	2	PR
6515012611137	Gloves Surgeon General Rubber Powder-Free Size 7.0 50S	2	PR
6515007822621	Mask Surgical Non-woven Fabric or Syn Filter Disp 50S	2	EA
NSN PENDING	Scrubs Endoscopic Surgical Operating Plastic Disp 100S	2	EA

TASK 354: OPERATING ROOM CLEANUP

NSN	Nomenclature	Amount	UM
6530011075798	Bag Sterilization Biohazard Disp 36x24 300S	2	EA
6530014604782	Container Sharps Biohazard Board Material Fold-Flat 5 Liter	0.2	EA
NSN PENDING	Detergent Enzymatic Cleaner Instrument Surgical 10Z Tube	0.25	OZ
NSN PENDING	Disinfectant Surgical Instrument Cidex OPA 1GAL	2	OZ
6515013648553	Glove Patient Exam/Treat Med Prepowdered Snug Fit Cuff Latex Ambid	4	EA
6530013472340	Towel Pack Surgical/Post-Op Blue/Gray Highly Absorbable 20S	5	EA

TASK 402: ISSUE OPERATING ROOM BASIC CONSUMABLE SETUP

NSN	Nomenclature	Amount	UM
6135009857845	Battery Nonrechargeable 1.5Volt Size AA 24S	8	EA
6515006600011	Blade Surgical Knife Detachable Car Steel #10	2	EA
6515010095293	Blade Surgical Knife Detachable Car Steel #11	2	EA
6515011067648	Canister Assembly Suction Apparatus Surgical Durable 1500CC Capacity	0.05	EA
6515010726380	Cannula Laryngeal Yankauer Design 72IN LB Clear 20S	1	EA
6530011501479	Drape Surgical 116x81IN Double Thick Disp Split 1IN Adhesive Area	2	EA
6515012157751	Gel Surgical Conductor Electrosurgical Nondrying 8OZ Tube	0.20	OZ
NSN PENDING	Irrigator Surgical System Disp Stryker Interpulse Battery Op 6S	0.3	EA
6515011535294	Pad Magnetic Needle & Blade Disp 96S	1	EA
6515011977649	Pad/Electrode Grounding Electrosurgical Pre-gelled Self Adh Plas 50S	1	EA
6515011977949	Pad Defibrillation 2 Pack for use with Defibrillator External Auto	0.06	SE
6515013148918	Pencil Electrode Electrosurgical Straight Shape 10FT Cord 50S	1	EA
6505013306269	Sodium Chloride Injection USP 0.9% 1000ML Bags 12S	4000	ML
6510001161285	Sponge Surgical Gauze 12-Ply 4x8IN White Radpq Sterile 80S	1	CO
6510009268883	Tape Adhesive Surgical White Porous Woven 2"x10YD	0.50	RL
NSN PENDING	Tip Irrigator Surgical Disposable 20S	0.3	EA
6530001101854	Towel Pack Surgical/Post-Op Blue/Gray Highly Absorbable 20S	2	EA
6515011742354	Tube Suction Surgical 12FT Plastic Transparent Disp 20S	0.20	EA

TASK 358: PERFORM SURGICAL AIRWAY PROCEDURE

NSN	Nomenclature	Amount	UM
	Operating Room Equipment Set (see Appendix B-1)		
	Basic Operating Room Consumable Set-Up (See Task 402)		
6515007638483	Suture Nonabsorbable Surgical Size 3-0 Unarmed Silk Black 36S	1	EA
6515011470204	Tube Tracheostomy Shiley Size 6 30 French High Volume	1	EA

¹The required *supplies* vary depending on PC

²The required *amounts* vary depending on PC

³The required *supplies* vary depending on functional area

Appendix C

FRSS Clinical Task & Supply Assignments

TASK 403: BURR HOLE PROCEDURE

NSN	Nomenclature	Amount	UM
	Operating Room Equipment Set (see Appendix B-1)		
	Burr Hole Instrument Set (see Appendix B-3)		
	Basic Operating Room Consumable Set-Up (See Task 402)		
6510000583047	Bandage Gauze 6-Ply Rolled White Sterile 4.5" x 4YD 100S.	1	RL
6510010854742	Cellulose Oxidized Regenerated 8x4IN 1 Ply 24S (Surgicel Strips)	2	EA
6510000080254	Gelatin Sponge Absorbable Individually Sealed 12x8Cm 6S (Gelfoam)	2	EA
6505012144500	Thrombin USP Bovine Derived 20000 Units w/Transfer Device	1	PG

TASK 494: THORACOTOMY

NSN	Nomenclature	Amount	UM
	Operating Room Equipment Set (see Appendix B-1)		
	Basic Major Instrument Set (See Appendix B-1)		
	Basic Operating Room Consumable Set-Up (See Appendix C-7)		
6515012812858	Blade Extended Electrosurgical Electrode 6IN Size Disp 40S	1	EA
6515009269201	Connector Tubing Straight Tapered Serrated Ends 3.5IN Long	.75	EA
6515007257843	Connector Tubing Y-Branched Tapered Serrated Ends 3.5IN Long 50S	.25	EA
6515010587450	Drainage Unit Pleural Cavity Plastic Disp Water Seal 3 Chamber 2300ML	1.5	EA
6515013928438	Drainage Unit Pleural Cavity Plastic Disp 3 Chamber w/Blood Retrieval	0.25	EA
6510002020800	Gauze Petroleum Accordion Folded White 18x3IN 12S	1	EA
6510007755706	Pad Abdominal 7.5x8IN White Sterile Sealed Packaging 240S	1	EA
6510011603261	Sponge Laparotomy Radiopaque 18x18IN 100S	10	EA
6515012525599	Stapler Skin Surgical Sterile Disposable Lightweight Wide Staples 6S	5	EA
6515012193856	Suture Nonabsorbable General Closure Size 1 w/Ndl Blue Mono 3S	5	EA
6515000678242	Suture Nonabsorbable Size 4-0 Sutopak Silk Black 36S	10	EA
6515010758288	Suture Nonabsorbable Size 2-0 Unarmed silk Black Braided 36S	3	EA
6515011535730	Suture Nonabsorbable Size 3-0 Cardio Dbl Armed Monofilament 36S	2	EA
6515003307179	Suture Nonabsorbable Size 2-0 Armed 2.5FT Monofilament 3S	5	EA
6515008669073	Tube Surgical Drainage Thoracic 36 French Straight 6-Eye Disp	2	EA

TASK 530: INDUCE/MAINTAIN GENERAL ANESTHESIA

NSN	Nomenclature	Amount	UM
	General Anesthesia Equipment Set (See Appendix B-3)		
6505002998179	Albumin Human USP 25% 100ML Can	0.75	CN
6505011169245	Albuterol Inhalation Aerosol 17GM 200 Metered Sprays	12	SP
6505007542547	Atropine Sulfate Injection 0.5MG/ML 20ML Vial	2.5	ML
6505013859409	Ephedrine Sulfate Injection 50MG/ML Ampoules 100S	50	MG
6505012385634	Epinephrine Injection 1ML Syringe-Needle Unit	1	EA
6505010731316	Fentanyl Citrate Injection 5ML Ampoule 10S	2	AM
6505010197627	Glycopyrrolate Injection 0.2MG/ML 20ML	5	ML
6505011179832	Isoflurane USP 100ML	60	ML
6505011533733	Ketamine Hydrochloride Injection 100MG/ML 5ML Vial	2	ML
6505012447982	Labetalol Hydrochloride Injection 5MG/ML 20ML Vial	8	ML
6505003343461	Lidocaine Hydrochloride Injection 50ML Vial 25S	10	ML
6505011253253	Mannitol Injection USP 25% 50ML Single Dose Vials 25S	4	VI
6505012415747	Midazolam Hydrochloride Injection 5MG/ML 2ML Vial 10S	2	MG
6505001490113	Morphine Sulfate Inj USP 10mg 1ml Cartridge-Needle Unit	4	EA
6505009586325	Naloxone Hydrochloride Injection 0.4MG/ML 1ML Ampoule 10S	1	AM
6505009586325	Neostigmine Methylsulfate Injection 10ML Multiple Dose Vial	5	ML

¹The required *supplies* vary depending on PC

²The required *amounts* vary depending on PC

³The required *supplies* vary depending on functional area

Appendix C

FRSS Clinical Task & Supply Assignments

TASK 530: INDUCE/MAINTAIN GENERAL ANESTHESIA (cont.)

NSN	Nomenclature	Amount	UM
6505001049320	Phenylephrine Hydrochloride Injection 1% 1ML 25S	1	AM
6505010880499	Scopolamine Hydrobromide Injection 0.4MG/ML 1ML Vial 25S	1	VI
6505013306269	Sodium Chloride Injection USP 0.9% 1000ML Bags 12S	4000	ML
6505010282260	Succinylcholine Chloride Sterile 1GM Container 12S	140	MG
6505010410558	Theopental Sodium Injection 500MG Vial 25S	350	MG
6505012582004	Vecuronium Bromide Injection 1MG/ML 10ML Vial 10S	2	MG
6515011295437	Airway Nasopharyngeal Argyl Design 28 French Curved Plastic	0.50	EA
6515011649637	Airway Pharyngeal 4IN Cut-Away Flange 30 French 30S	0.75	EA
6135008264798	Battery Nonrechargeable 1.5 Volt Size AAA 24S	.05	EA
6135010631978	Battery Nonrechargeable 9V Dry Cell 12S	.05	EA
6515013719617	Blood & Intravenous Solution Warming Set 8FT LG 18MM 30S	1	EA
6515013909627	Catheter & Needle Unit IV 14GA 1.25" Protecto-Cath Design 200S	1	EA
6515003245500	Depressor Tongue Wood 6x.75x.062" Straight	1	EA
6515012478232	Disc Adhesive Stethoscope 1.25IN Diameter Aperture 612S	1	EA
7540006344157	Form Clinical Record Anesthesia 10x8IN	1	EA
6515013648553	Glove Patient Exam/Treat Med Prepowdered Snug Fit Cuff Latex Ambid	2	EA
6515011050614	Intravenous Injection Set Vented 15 Drops/ML 78" L Sterile Disp	2	EA
7520013964722	Marker Tube Type Black Permanent Ultra-Fine Sharpie 12S	0.5	EA
6515007542836	Needle Hypodermic 20GA 1.5IN LG Luer Lock Sterile 100S	10	EA
6510007863736	Pad Isopropyl Alcohol Impregnated Nonwvn Cotton/Rayon 1.5-2.6x1.8-2"	10	EA
6515008648864	Stopcock IV Therapy 3-Way 30IN LG w/Male Luer Connector	1	EA
6515013948327	Stylet Tracheal Tube Fits 7.5-10MM Disp 10S	0.5	EA
6515007540412	Syringe Hypodermic GP 10-12ml Cap Luer Slip w/o Ndl Concentric Tip	10	EA
6515004627348	Syringe Hypodermic General Purpose 3ML 100S	5	EA
6510009268883	Tape Adhesive Surgical White Porous Woven 2"x10YD	0.50	RL
6515011885316	Tube Drainage Surgical Penrose 1x18IN	1	EA
6515005628308	Tube Inhaler Force-Fit 72" Plastic w/Molded Resilient Tape Disp	1	EA
6515010369034	Tube Tracheal Radiopaque Murphy 7.5MM Disp 10S	1	EA

TASK 533: INDUCE/MAINTAIN REGIONAL BLOCK

NSN	Nomenclature	Amount	UM
	General Anesthesia Equipment Set (See Appendix B-3)		
6505011277946	Bupivacaine Hydrochloride Injection 50% 30ML Vial 10S	50	ML
6505003343461	Lidocaine Hydrochloride Injection 50ML Vial 25S	50	ML
6505012415747	Midazolam Hydrochloride Injection 5MG/ML 2ML Vial 10S	5	MG
6505013306269	Sodium Chloride Injection USP 0.9% 1000ML Bags 12S	4000	ML
6135010631978	Battery Nonrechargeable 9V Dry Cell 12S	.05	EA
6135008264798	Battery Nonrechargeable 1.5 Volt Size AAA 24S	.05	EA
6515013719617	Blood & Intravenous Solution Warming Set 8FT LG 18MM 30S	1	EA
6515013909654	Catheter & Needle Unit IV 18GA 1.25" Protecto-Cath Design 200S	1	EA
6515013909627	Catheter & Needle Unit IV 14GA 1.25" Protecto-Cath Design 200S	1	EA
6515013648553	Glove Patient Exam/Treat Med Prepowdered Snug Fit Cuff Latex Ambid	2	EA
6515011050614	Intravenous Injection Set Vented 15 Drops/ML 78" L Sterile Disp	1	EA
7520013964722	Marker Tube Type Black Permanent Ultra-Fine Sharpie 12S	0.5	EA
6515007542836	Needle Hypodermic 20GA 1.5IN LG Luer Lock Sterile 100S	8	EA
6515011039996	Needle Hypodermic Spinal 22 GA 3.375-3.625LG Luer Lock 25S	1	EA
6515008648864	Stopcock IV Therapy 3-Way 30IN LG w/Male Luer Connector	2	EA
6515014123101	Syringe Hypodermic Disp Ster 20ml Plastic I.S.	3	EA
6515007540412	Syringe Hypodermic GP 10-12ml Cap Luer Slip w/o Ndl Concentric Tip	2	EA
6515004627348	Syringe Hypodermic General Purpose 3ML 100S	3	EA

¹The required *supplies* vary depending on PC

²The required *amounts* vary depending on PC

³The required *supplies* vary depending on functional area

Appendix C

FRSS Clinical Task & Supply Assignments

TASK 595: BLOOD GAS ESTIMATION

NSN	Nomenclature	Amount	UM
6630014112405	Analyzer Clinical Chemistry I-Stat	1	EA

TASK 596: ELECTROLYTE LEVELS (Na, K, Cl, CO₂)

NSN	Nomenclature	Amount	UM
6630014112405	Analyzer Clinical Chemistry I-Stat	1	EA

TASK 614: HEMATOCRIT LEVEL

NSN	Nomenclature	Amount	UM
6630014112405	Analyzer Clinical Chemistry I-Stat	1	EA

TASK 748: ASSEMBLE MATERIAL/CLEANUP³

NSN	Nomenclature	Amount	UM
6530011075798	Bag Sterilization Biohazard Disp 36x24 300S	1	EA
6530014588301	Basin Wash 7 Quart Sterilizable Fits Stand Plas Durable	1	EA
6530014604782	Container Sharps Biohazard Board Material Fold-Flat 5 Liter	0.2	EA
NSN PENDING	Disinfectant Surgical Instrument Cidex OPA 1GAL	1	OZ
6515013648553	Glove Patient Exam/Treat Med Prepowdered Snug Fit Cuff Latex Ambid	2	EA
6515002267692	Glove Patient Exam/Treat LGE Prepowdered Snug Fit Cuff Latex Ambid	2	EA
NSN PENDING	Pail Utility CRS Plastic Surgical Operation Room 12 Qt	1	EA
6510002940009	Sponge Surgical Gauze Sterile 6.75x6IN 5 Sponges per Envelope 600S	2	EN
6530013472340	Towel Pack Surgical/Post-Op Blue/Gray Highly Absorbable 20S	4	EA

TASK 1012: AMPUTATION

NSN	Nomenclature	Amount	UM
	Operating Room Equipment Set (see Appendix B-1)		
	Extremity Instrument Set (see Appendix B-2)		
	Basic Operating Room Consumable Set-Up (See Task 402)		
6510001058507	Bandage Elastic Coban Flesh 3Inx5YD 24S	2	RL
6510000583047	Bandage Gauze 6-Ply Rolled White Sterile 4.5" x 4YD 100S.	2	RL
6510007755706	Pad Abdominal 7.5x8IN White Sterile Sealed Packaging 240S	3	EA
6515003632700	Saw Bone Cutting Wire 20IN LG w/oHandle	1	EA
6515012525599	Stapler Skin Surgical Sterile Disposable Lightweight Wide Staples 6S	4	EA
6515013553928	Suture Absorbable Size 3-0 27IN LG Braided Coated Vicryl 36S	3	EA
6515010758288	Suture Nonabsorbable Size 2-0 Unarmed silk Black Braided 36S	3	EA
6515011885316	Tube Drainage Surgical Penrose 1x18IN	1	EA

TASK 2014: INTUBATION

NSN	Nomenclature	Amount	UM
6505010282260	Succinylcholine Chloride Sterile 1GM Container 12S	140	MG
6505012582004	Vecuronium Bromide Injection 1MG/ML 10ML Vial 10S	2	MG
6135009857845	Battery Nonrechargeable 1.5Volt Size AA 24S	.05	EA
6515014604685	Blade Laryngoscope Adult Macintosh Number 3 Plastic Durable	1	EA
6515014604672	Blade Laryngoscope Adult Macintosh Number 4 Plastic Durable	1	EA
6515014604681	Blade Laryngoscope Adult Miller Number 3 Plastic Disposable	1	EA
6515003245500	Depressor Tongue Wood 6x.75x.062" Straight	1	EA
6515014509790	Laryngoscope Set Including Handle, Basic ENT Light, Mac 3.5	1	SE

¹The required *supplies* vary depending on PC

²The required *amounts* vary depending on PC

³The required *supplies* vary depending on functional area

Appendix C

FRSS Clinical Task & Supply Assignments

TASK Z014: INTUBATION (cont.)

NSN	Nomenclature	Amount	UM
6505001538809	Lubricant Surgical 4 OZ Tube	0.5	OZ
6515011727650	Needle Hypodermic C13A GP 22GA 1.438-1.562" Luer Lock Reg Ster	2	EA
6510007863736	Pad Isopropyl Alcohol Impregnated Nonwvn Cotton/Rayon 1.5-2.6x1.8-2"	2	EA
6515013948327	Styler Tracheal Tube 7.5-10mm Plas Ster Disp	1	EA
6515007540412	Syringe Hypodermic GP 10-12ml Cap Luer Slip w/o Ndl Concentric Tip	2	EA
6510009268883	Tape Adhesive Surgical White Porous Woven 2"x10YD	0.10	RL
6515010369034	Tube Endotracheal Murphy E12 w/Cuff 7.5MM Disp 10S	1	EA
6515001050759	Tube Endotracheal Murphy E12 w/Cuff 8.0MMDisp 10S	1	EA

TASK Z027: CARDIO ARREST RESUSCITATION

NSN	Nomenclature	Amount	UM
6515011742406	Defibrillator Monitor-Recorder Battery-p Portable w/Override	1	EA
6505001539740	Heparin Sodium Injection 1000 Units per ML 20ML Vial	1	VI
6515013448487	Injector Tube Plas Reusable Accom 1ml & 2ml Medication Needle Cart	1	EA
6505001490113	Morphine Sulfate Inj USP 10mg 1ml Cartridge-Needle Unit	1	EA
6515011727650	Needle Hypodermic C13A GP 22GA 1.438-1.562" Luer Lock Reg Ster	1	EA
6515014594403	Pad Defibrillator Auto External 2-Pack	1	SE
6510007863736	Pad Isopropyl Alcohol Impregnated Nonwvn Cotton/Rayon 1.5-2.6x1.8-2"	2	EA
6515007540412	Syringe Hypodermic GP 10-12ml Cap Luer Slip w/o Ndl Concentric Tip	1	EA

TASK Z037: BVM SETUP

NSN	Nomenclature	Amount	UM
6515012045394	Resuscitator Hand-Operated Small & Medium Adult Face Masks	1	EA
6515005628308	Tube Inhaler Force-Fit 72" Plastic w/Molded Resilient Tape Disp	1	EA

TASK Z042: INSERT CHEST TUBE

NSN	Nomenclature	Amount	UM
6510012404514	Applicator Benzoin Tincture Impregnated 4IN Swabstick 500S	1	EA
6515006600011	Blade Surgical Knife Detachable Car Steel #10	1	EA
6515003344900	Forceps Hemostatic Halsted Mosquito Pt 4.75-5.25" CRS	2	EA
6510002020800	Gauze Petroleum Accordion Folded White 18x3IN 12S	1	EA
6515012522484	Gloves Surgeon General Rubber Powder-Free Size 8.0 50S	1	PR
6515012534260	Gloves Surgeon General Rubber Powder-Free Size 7.5 50S	1	PR
6515012611137	Gloves Surgeon General Rubber Powder-Free Size 7.0 50S	1	PR
6540012901157	Goggles Protective Clear Distortion Free Lens 50S	1	PR
6515003447800	Handle Surg Knife Detach Blade Size 3 Narrow Nose	1	EA
6515003417200	Holder Suture Needle Collier 5" Straight Jaw Box Lock Type	1	EA
6515013277257	Mask Shield Face Protective Female Opening	1	EA
6510010100307	Pad Povidone-Iodine Impregnated Sterile Cotton/Rayon Brown	1	EA
6515013225898	Razor Surgical Preparation Disposable Plastic 100S	.75	EA
6515003640920	Scissors General Surgery Mayo Design 7IN LG Blunt Point	1	EA
6515011535733	Suture Nonabsorbable Size 1 Single Armed General Closure Plas 60IN 12S	1	EA
6510009268883	Tape Adhesive Surgical White Porous Woven 2" x 10YD	0.10	RL
6530013472340	Towel Pack Surgical/Post-Op Blue/Gray Highly Absorbable 20S	1	EA
6515008669073	Tube Surgical Drainage Thoracic 36 French Straight 6-Eye Disp	1	EA
6515009269150	Valve Surg Drain Heimlich 4.5" L 1" D Flutter Rubber Sterile Disp	1	EA

¹The required *supplies* vary depending on PC

²The required *amounts* vary depending on PC

³The required *supplies* vary depending on functional area

Appendix C

FRSS Clinical Task & Supply Assignments

TASK Z045: CHANGE DRAINAGE BOTTLES

NSN	Nomenclature	Amount	UM
6515010587450	Drainage Unit Pleural Cavity Plastic Disp Water Seal 3 Chamber 2300ML	1	EA

TASK Z083: EXPOSE PATIENT FOR EXAM

NSN	Nomenclature	Amount	UM
6515003634150	Blade Finger Ring Saw Steel Carbon	1	EA
6515003634100	Saw Finger Ring .75" Blade D 6" L .1875" Arbor Hole Diameter	1	EA
6515009357138	Scissors Bandage 7.25" Angle to Hdl 1.5" Cut Lg Blunt Pts CRS	1	EA

TASK Z094: EXTREMITY TRACTION APPLICATION/ADJUST

NSN	Nomenclature	Amount	UM
6515012508936	Splint Traction-Extraction Adult Aluminum Dual-Hinged w/Case	1	EA

TASK Z177: DIAGNOSTIC PERITONEAL LAVAGE

NSN	Nomenclature	Amount	UM
6515006600011	Blade Surgical Knife Detachable Car Steel #10	0.5	EA
6515010095293	Blade Surgical Knife Detachable Car Steel #11	0.5	EA
6515003345600	Forceps Hemostatic Halsted 5IN LG Straight Jaw Box Lock	1	EA
6515003344900	Forceps Hemostatic Halsted Mosquito Pt 4.75-5.25" CRS	2	EA
6515003377800	Forceps Tissue Adson 4.5 IN LG Tweezer Straight & Smooth Jaw	2	EA
6515012522484	Gloves Surgeon General Rubber Powder-Free Size 8.0 50S	0.5	PR
6515012534260	Gloves Surgeon General Rubber Powder-Free Size 7.5 50S	0.5	PR
6515012611137	Gloves Surgeon General Rubber Powder-Free Size 7.0 50S	0.5	PR
6540012901157	Goggles Protective Clear Distortion Free Lens 50S	1	PR
6515003447800	Handle Surg Knife Detach Blade Size 3 Narrow Nose	1	EA
6515003417200	Holder Suture Needle Collier 5" Straight Jaw Box Lock Type	1	EA
6515011050614	Intravenous Inj Set Vented 15 Drops/ml 78" L Ster Disp	1	EA
6515013277257	Mask Shield Face Protective Female Opening	1	EA
6515003640920	Scissors General Surgery Mayo Design 7IN LG Blunt Point	1	EA
6505013306269	Sodium Chloride Injection USP 0.9% 1000ML Bags 12S	1000	ML
6510002940009	Sponge Surgical Guaze Sterile 6.75x6IN 5 Sponges per Envelope 600S	2	EN
6515007344342	Suture Nonabsorbable Sz 4-0 1 18" Strand C3 RVS Cutting Edge Nylon	1	EA
6510009268883	Tape Adhesive Surgical White Porous Woven 2" x 10YD	0.10	RL

TASK Z378: VASCULAR SHUNT-TEMPORARY LIGATION

NSN	Nomenclature	Amount	UM
	Operating Room Equipment Set (see Appendix B-1)		
	Extremity Instrument Set (see Appendix B-2)		
	Basic Operating Room Consumable Set-Up (See Task 402)		
6515014618338	Cast Polymer Materiel Long Bone 5S	0.75	EA
6515014618357	Cast Polymer Materiel Whole Arm 5S	0.75	EA
6515013999050	Catheter Cardio Fogarty Embolectomy 4 French 80CM LG	0.50	EA
6515011774924	Catheter Cardio Fogarty Embolectomy 6 French 80CM LG	0.50	EA
6510010854742	Cellulose Oxidized Regenerated 8x4IN 1 Ply 24S (Surgicel Strips)	2	EA
6515013253715	Fixation Device Orthopedic External	0.75	EA
6510000802054	Gelatin Sponge Absorbable 12x8x1CM 6S (Gelfoam)	2	EA
6505001539740	Heparin Sodium Injection 1000 Units per ML 20ML Vial	0.50	VI
6515011656718	Loop Vascular Surgical Rubber Blue Oval Loop Blunt Round 10S	2	EA
6515011700642	Shunt Carotid Bypass Tapered 17-10 French Diameter 5S	0.25	EA

¹The required *supplies* vary depending on PC

²The required *amounts* vary depending on PC

³The required *supplies* vary depending on functional area

Appendix C

FRSS Clinical Task & Supply Assignments

TASK Z378: VASCULAR SHUNT-TEMPORARY LIGATION (cont.)

NSN	Nomenclature	Amount	UM
6515014687929	Shunt Sundt Heparin Bonded Large	1	EA
6510011603261	Sponge Laparotomy Radiopaque 18x18IN 100S	5	EA
6515012525599	Stapler Skin Surgical Sterile Disposable Lightweight Wide Staples 6S	4	EA
6515009526897	Suture Absorbable Size 4-0 27IN 1G w/Needle 36S	5	EA
6515000678242	Suture Nonabsorbable Size 4-0 Sutupak Silk Black 36S	10	EA
6515010758288	Suture Nonabsorbable Size 2-0 Unarmed silk Black Braided 36S	5	EA
6515010113675	Suture Nonabsorbable Size 4-0 Double Armed Monofilament Plas 36S	5	EA
6515011535730	Suture Nonabsorbable Size 3-0 Cardio Dbl Armed Monofilament 36S	5	EA
6505012144500	Thrombin USP Bovine Derived 20000 Units w/Transfer Device	2	PG

TASK ZZ03: NEEDLE THORACOSTOMY

NSN	Nomenclature	Amount	UM
6515013365874	Catheter & Needle Unit IV 16GA 1.25" w/Luer-Lock Hub Ster	1	EA
6540012901157	Goggles Protective Clear Distortion Free Lens 50S	1	PR
6510010100307	Pad Povidone-Iodine Impregnated Sterile Cotton/Rayon Brown	1	EA
6510002940009	Sponge Surgical Guaze Sterile 6.75x6IN 5 Sponges per Envelope 600S	1	EN
6515014123099	Syringe Hypodermic General Purpose 60ML 20S	1	EA
6515011885316	Tube Drainage Surgical Penrose 1x18IN	1	EA

TASK ZZ18: CLEAN & DISINFECT INSTRUMENTS³

NSN	Nomenclature	Amount	UM
6530014588301	Basin Wash 7 Quart Sterilizable Fits Stand Plas Durable	2	EA
6850010735955	Cleaner & Lubricant Surgical Instrument 16OZ Can	0.10	OZ
NSN PENDING	Detergent Enzymatic Cleaner Instrument Surgical 1OZ Tube	0.25	OZ
NSN PENDING	Disinfectant Surgical Instrument Cidex OPA 1GAL	2	OZ
6510002940009	Sponge Surgical Guaze Sterile 6.75x6IN 5 Sponges per Envelope 600S	2	EN
6530013472340	Towel Pack Surgical/Post-Op Blue/Gray Highly Absorbable 20S	2	EA
6530010862464	Wrapper Sterilization Blue 54x54IN Plastic Disp 100S	1	EA

TASK ZZ19: WARM INFUSION FLUIDS

NSN	Nomenclature	Amount	UM
6515013724470	Blood & Fluid Warmer 110/220V 50/60HZ AC	1	EA
6515013719617	Blood & Intravenous Solution Warming Set 8FT LG 18MM 30S	1	EA

TASK ZZ32: ABBREVIATED LAPAROTOMY

NSN	Nomenclature	Amount	UM
	Operating Room Equipment Set (see Appendix B-1)		
	Basic Major Instrument Set (See Appendix B-1)		
	Basic Operating Room Consumable Set-Up (See Appendix C-7)		
6515012812858	Blade Extended Electrosurgical Electrode 6IN Size Disp 40S	1	EA
6515001450011	Catheter Urethral Rob-Nelson Straight Sterile Disp 100S	0.5	EA
6515001490104	Catheterization Kit Urethral w/Bot-Outlet Drain Bag 16FR Disp	0.75	EA
6510010854742	Cellulose Oxidized Regenerated 8x4IN 1 Ply 24S (Surgicel Strips)	2	EA
6515013086381	Drain Surgical Hacienda Wound Evacuator Tube Adult 28 French 10S	1	EA
6515013414524	Drainage Kit Jackson-Pratt 7MM Sterile 5S	1	EA
6510000802054	Gelatin Sponge Absorbable 12x8x1CM 6S (Gelfoam)	2	EA
6510007755706	Pad Abdominal 7.5x8IN White Sterile Sealed Packaging 240S	3	EA
6510011603261	Sponge Laparotomy Radiopaque 18x18IN 100S	15	EA

¹The required *supplies* vary depending on PC

²The required *amounts* vary depending on PC

³The required *supplies* vary depending on functional area

Appendix C

FRSS Clinical Task & Supply Assignments

TASK ZZ32: ABBREVIATED LAPAROTOMY (cont.)

NSN	Nomenclature	Amount	UM
NSN PENDING	Staple Unit Multi-Fire GIA Disp 12S	2	EA
6515012525599	Stapler Skin Surgical Sterile Disposable Lightweight Wide Staples 6S	5	EA
6515012615870	Suture Absorbable Size 3-0 18IN LG Coated Vicryl 24S	5	EA
6515009526897	Suture Absorbable Size 4-0 27IN IG w/Needle 36S	5	EA
6515013553928	Suture Absorbable Size 3-0 27IN LG Braided Coated Vicryl 36S	5	EA
6515013549470	Suture Absorbable Size 1-0 36IN LG Armed Coated Vicryl 36S	5	EA
6515000678242	Suture Nonabsorbable Size 4-0 Sutupak Silk Black 36S	10	EA
6515007638483	Suture Nonabsorbable Surgical Size 3-0 Unarmed Silk Black 36S	5	EA
6515010758288	Suture Nonabsorbable Size 2-0 Unarmed silk Black Braided 36S	5	EA
6515011535730	Suture Nonabsorbable Size 3-0 Cardio Dbl Armed Monofilament 36S	5	EA
6515003307179	Suture Nonabsorbable Size 2-0 Armed 2.5FT Monofilament 3S	5	EA
6505012144500	Thrombin USP Bovine Derived 20000 Units w/Transfer Device	2	PG
6515001490316	Tube Stomach Surgical Plastic Salem E19 w/Funnel 16FR Dbl Lumen 48"	1	EA

TASK ZZ33: PATIENT CORE WARMING

NSN	Nomenclature	Amount	UM
NSN PENDING	Hypothermia Warming Mitt/Seal Aquarius	1	EA
NSN PENDING	Hypothermia Exchange Chamber Aquarius	1	EA

TASK ZZ34: PERFORM ULTRASOUND ASSESSMENT

NSN	Nomenclature	Amount	UM
NSN PENDING	Ultrasound Unit Hand-Held Portable SonoSite 180 Battery & AC	1	EA

¹The required *supplies* vary depending on PC

²The required *amounts* vary depending on PC

³The required *supplies* vary depending on functional area

Appendix D FRSS Equipment List

NSN	Item Nomenclature	Qty	U/I	Weight	Cube
6630014112405	ANALYZER CLINICAL CHEMISTRY (Note: I-stat)	1.00	EA	1.200	0.100
6530014588301	BASIN WASH 7QT STERILIZABLE PLAS FITS STAND DURABLE 12S	1.00	PG	0.120	0.350
6515014594417	BATTERY PACK DEFIBRILLATOR AUTOMATIC EXTERNAL	1.00	EA	3.000	0.750
6530014617882	BEDPAN PONTON-TYPE STACKABLE AUTOCLAVABLE 12S	0.16	EA	1.500	0.025
6515003634150	BLADE FINGER RING SAW .018" THICK .75" DIAMETER 90 TEETH STEEL	1.00	EA	0.010	0.001
6515014604681	BLADE LARYNGOSCOPE ADULT MILLER NO 3 DISP (Laryngoscope set incs 1)	2.00	EA	0.550	0.120
6515014604685	BLADE LARYNGOSCOPE ADULT SIZE MAC NO. 3 DISP	4.00	EA	0.350	0.110
6515014604672	BLADE LARYNGOSCOPE ADULT SIZE MAC NO. 4 DISP	4.00	EA	0.350	0.110
7210009356666	BLANKET CASUALTY PLASTIC FILM ALUM COATED 95X56IN GREEN	18.00	EA	0.160	0.010
6515013724470	BLOOD & FLUID WARMER 110/220V 50/60HZ AC 8.3x9.5"	3.00	EA	2.000	0.750
7530002223527	BOOK,RECORD	1.00	EA	0.000	0.000
6515005152113	BRACE BIT BONE HUDSON 9.75" LG SNAP LOCK PASIVATED	1.00	EA	1.500	0.120
6515003124125	BURR CRANIAL HUDSON 14MM DIA 3.812"LG 6 FLUTE TRUNCATED CONE	1.00	EA	0.240	0.010
6515005152115	BURR CRANIAL HUDSON 16MM DIA 3.812"LG 6 BALL HEAD 8 FLUTE	1.00	EA	0.170	0.024
6515003124130	BURR CRANIAL HUDSON 20MM DIA 3.812"LG 6 BALL HEAD 8 FLUTE	1.00	EA	0.320	0.038
6515005152114	BURR CRANIAL HUDSON 9MM DIA 4.094"LG FLAME HEAD 6 FLUTE	1.00	EA	0.220	0.016
6150001440091	CABLE ASSEMBLY POWER	4.00	EA	2.400	0.133
6515003866800	CANNULA BRAIN FRAZIER 8 FRENCH 7.5"LG OPEN END TIP CRS	3.00	EA	0.130	0.003
6515006903212	CLAMP ARTERY DEBAKEY-BAHNSON CURVED & SERRATED 10IN	6.00	EA	0.500	0.060
6515008901682	CLAMP ARTERY GLOVER 6.5CM LG CURVED SERRATED 27MM JAW LG	12.00	EA	0.060	0.007
7520002405503	CLIP BOARD FILE 9X17IN	4.00	EA	1.200	0.185
6515014593834	DEFIBRILLATOR MONITOR AUTO EXTERNAL W/PHYSICIAN OVERRIDE	1.00	EA	0.550	0.120
6515000000069	ELECTROSURGICAL APPARATUS MOBILE 115V 50/60HZ AC (Note: Mini unit)	1.00	EA	13.000	0.276
6515003280700	ELEVATOR PERIOSTEAL 7.75" LG CURVED BLADE .625" BLADE WIDTH	3.00	EA	0.200	0.010
6515003279400	ELEVATOR SET PERIOSTEAL DOYEN CURVED BLUNT EDGE LGE .25"W BLADE	3.00	SE	0.380	0.012
6515003301300	FILE BONE 3.5" BLADE STR SERRATED COARSE CUT RD BLUNT TIP	3.00	EA	0.330	0.042
6515003669200	FORCEPS BONE CUTTING BETHUNE 13.5" LG CUPPED SCREW LOCK	3.00	EA	1.720	0.056
6515003333700	FORCEPS DRESSING 10" LG STRAIGHT & SERRATED RD TIP	3.00	EA	0.420	0.014
6515003341400	FORCEPS GALL DUCT LAHEY DESIGN 7.5"LG CRS BOX LOCK	6.00	EA	0.300	0.200
6515003373900	FORCEPS GAUZE PAD HOLDING FOERSTER 9-9.75" LG BOX LOCK J	6.00	EA	0.230	0.010
6515003345600	FORCEPS HEMO HALSTED 5"LG 0.875"JAW STRAIGHT JAW CRS BOX LOCK	4.00	EA	0.110	0.008
6515003344900	FORCEPS HEMO HALSTED DESIGN 4.75-5.25" LG SLIGHTLY CRVD SERR CRS	20.00	EA	0.100	0.009
6515003343800	FORCEPS HEMO KELLY 5.25-5.75" LG SLIGHT CURVED JAW STR HDL	42.00	EA	0.150	0.010
6515003344100	FORCEPS HEMO MAYO-CARMALT 7.750 MIN 8.250 MAX O/A LG CRS	6.00	EA	0.290	0.019
6515000653181	FORCEPS HEMO MIXTER HALF-CURVED 6.87-7.375"LG 1.625-1.875"JAW	6.00	EA	0.090	0.010

Appendix D FRSS Equipment List

NSN	Item Nomenclature	QTY	U/I	Weight	Cube
6515003349500	FORCEPS HEMO PEAN DESIGN SLIGHTLY CURVED JAW 9" LONF	6.00	EA	0.09	0.010
6515003347400	FORCEPS HEMO ROCHESTER-OCHSNER 1.5-1.75" STR JAW 6.25-6.75" LG	6.00	EA	0.190	0.012
6515003347500	FORCEPS HEMO ROCHESTER-OCHSNER 1.875" JAW LG STR 7.25" LG SZ 2	6.00	EA	0.300	0.010
6515003344300	FORCEPS HEMO ROCHESTER-PEAN 6" LG 1.875" JAW LG QTR-CRVD	36.00	EA	0.210	0.010
6515003382900	FORCEPS HEMO SCHMIDT DSGN 7.25" LG CURVED SERRATED JAW	12.00	EA	0.190	0.040
6515010489066	FORCEPS HEMOSTATIC STORZ DSGN R ANG JAW 8.75" LG 52MM JAW	6.00	EA	0.190	0.005
6515011398167	FORCEPS INTESTINAL ANGULAR GLASSMAN NON-CRUSHING 9" LG	6.00	EA	0.010	0.001
6515003352900	FORCEPS INTESTINAL BABCOCK DESIGN 7.750" LG STR BOX LOCK	12.00	EA	0.180	0.010
6515003355800	FORCEPS KIDNEY PEDICLE GUYON-PEAN 9.25-9.50" O/A LG BOX LOCK	6.00	EA	0.310	0.025
6515003359100	FORCEPS LUNG GRASPING COLLIN DESIGN TRIANG JAW 8" O/A LG	6.00	EA	0.330	0.050
6515003379900	FORCEPS TISSUE 5.5" LG TWEEZER STRAIGHT & SMOOTH JAW RD TIP CRS	6.00	EA	0.100	0.080
6515003377800	FORCEPS TISSUE ADSON 4.50" LG TWEEZER STRAIGHT & SMOOTH JAW CRS	10.00	EA	0.080	0.010
6515003380300	FORCEPS TISSUE ALLIS DSGN 6" LG PIVOTED STR & SMOOTH JAW	12.00	EA	0.130	0.010
6515006903208	FORCEPS TISSUE DEBAKEY 7.75" LG TWEEZER STR & SERRATED JAW	12.00	EA	0.190	0.021
6515006903209	FORCEPS TISSUE DEBAKEY 9.5" LG TWEEZER STR & SERRATED JAW	6.00	EA	0.310	0.043
6515012983857	FORCEPS TISSUE FERRIS-SMITH TWEEZER 7" LG W/1x2 TEETH	3.00	EA	0.250	0.030
6515003204600	FORCEPS TOWEL BACKHAUS 5.25" LG OPPOSED PRONGS TOWEL CLAMP	36.00	EA	0.250	0.019
6515003323300	FORCEPS TRACHEAL TUBE MAGILL FENESTR & SERR ADL W/O LIGHT	1.00	EA	0.650	0.050
6540012901157	GOGGLES PROTECTIVE INFECTION DISTORTION-FREE LENSES ADJ 100S	0.04	PG	4.500	0.005
6515003632400	HANDLE BONE CUTTING WIRE SAW RECTANGULAR W/ROUNDED ENDS	6.00	PR	0.130	0.010
6515003447800	HANDLE SURGICAL KNIFE DETACHABLE BLADE SIZE 3 NARROW NOSE	13.00	EA	0.080	0.002
6515011417469	HANDLE SURGICAL KNIFE DETACHABLE BLADE SZ 3L U/W NO. 10, 11, 12, 15	3.00	EA	0.125	1.018
6515003417200	HOLDER SUTURE NEEDLE COLLIER 5" LG STRAIGHT JAW BOX LOCK CRS	10.00	EA	0.160	0.012
6515006903200	HOLDER SUTURE NEEDLE DEBAKEY 9" LG SERRATED TUNGSTEN JAWS	6.00	EA	0.310	0.023
6515002998737	HOLDER SUTURE NEEDLE HEGAR-MAYO 7" LG SERRATED TUNGSTEN	12.00	EA	0.220	0.010
6515012808163	INFUSOR PRESSURE BLOOD IV 1000ML COLOR-CODED 48S (Note: Durable)	0.30	PG	0.350	0.045
6515013448487	INJECTOR TUBE PLAS ACCOM 1ML & 2ML MED NEEDLE CART UNIT	5.00	EA	0.110	0.065
6515010457158	KNIFE STERNUM LEBSCH DSGN 10" LG PASSIVATED	3.00	EA	0.500	0.063
6515014553888	LANTERN ELEC HEAD MOUNT HALOGEN & KRYPTON BULB	10.00	EA	0.6000	0.0300
6515014509790	LARYNGOSCOPE SET w/CASE LIGHT HANDLE MAC 3.5 MILLER 3 SPARE BULB	3.00	EA	0.250	0.020
6540014553885	LENS RED LANTERN ELEC HEAD MOUNT	10.00	EA	0.1000	0.0010
8405008893683	LINER WET WEATHER PONCHO (Note: Used as replacement for wool blankets)	18.00	EA	1.440	0.050
6530014325114	LITTER RIGID FOLDING RAVEN POLYPROPYLENE COVER	18.00	EA	11.00	0.02
6515012340253	MALLET BONE SURGERY CRS 7.5-11" LG 3.125" HEAD LG 2 POUNDS	3.00	EA	2.000	0.041
6515014196393	MASK AIRWAY LARYNGEAL REUSABLE SILICONE SIZ3 4 19CM	1.00	EA	2.000	0.350

Appendix D FRSS Equipment List

NSN	Item Nomenclature	QTY	U/I	Weight	Cube
6545014586178	OTOSCOPE AND OPHTHALMOSCOPE SET DELUXE W/SPECULUMS SOFTCASE	3.00	SE	0.25	0.02
6515014660971	OXIMETER PULSE HAND-HELD BATTERY POWERED NON-RECHARABLE	12.00	EA	0.15	0.00
NSN PENDING	PAIL UTILITY PLASTIC SURGICAL OPERATING ROOM 12QT	2.00	EA	0.30	0.03
7210002998520	PILLOW PNEUMATIC COTTON RUBBER KHAKI OR OLIVE DRAB 16.5X13INCHES	4.00	EA	0.830	0.030
6515011190018	PROBE GEN OPER 5" LG .062" DIA SPATULATE HANDLE BULBOUS TIP	3.00	EA	0.360	0.049
4110012877111	REFRIGERATOR,SOLID STATE,BIOLOGICALS, BLOOD PRODUCTS	1.00	EA	45.000	1.000
6515012045394	RESUSCITATOR HAND OPERATED SM MED & ADL MASKS W/CASE	5.00	EA	3.000	0.070
6515011398969	RETRACTOR ABDOMINAL CODMAN-SHURTLIFF SZ 2.50X3.25" TWO BLADE	3.00	EA	3.500	0.451
6515003603530	RETRACTOR ABDOMINAL DEAVER DESIGN 2X12" SIZE CRS	3.00	EA	0.720	0.069
6515003603510	RETRACTOR ABDOMINAL DEAVER DESIGN CRS 1.5X12" SIZE	3.00	EA	0.690	0.067
6515011398407	RETRACTOR ABDOMINAL RICHARDSON DSGN 9 1/8" LG BLADE 1X0.75" CRS	6.00	EA	0.010	0.001
6515011398196	RETRACTOR GEN OPER HARRINGTON 13X2.25" CRVD RIGHT PASSIVATED	3.00	EA	0.010	0.001
6515009269193	RETRACTOR MASTOID WEITLANER 6.5" HOOK UNIT TYPE 3 VS 4 PRONGS	12.00	EA	0.310	0.013
6515011346649	RETRACTOR RIB BUFORD-FINOCCHIETO DESIGN FENESTRATED	3.00	EA	5.460	0.600
6515003603850	RETRACTOR SET ABDOMINAL RICHARDSON-EASTMAN DOUBLE END	3.00	SE	0.810	0.144
6515006647853	RETRACTOR SET GENERAL OPERATING DOUBLE END 1.5x13" & 2x13" BLADES	3.00	SE	1.250	0.069
6515003609200	RETRACTOR SET GENERAL OPERATING DOUBLE END 8.5 & 8.75" BLADES	6.00	SE	0.430	0.031
6515003618980	RETRACTOR TRACHEAL HUPP SHARP BLADE POINT 3 PRONG QTY	6.00	EA	0.130	0.014
6515003620200	RETRACTOR VEIN CUSHING DESIGN 8.5"	12.00	EA	0.240	0.014
6515003634100	SAW FINGER RING .75"BLADE DIA 6"LG 0.1875" ARBOR HOLE DIAMETER	1.00	EA	0.25	0.01
6515009357138	SCISSORS BANDAGE 7.25" LG ANG TO HDL 1.50" CUT LG BLUNT PTS CRS	4.00	EA	0.19	0.01
6515003640520	SCISSORS GEN SURG MAYO CRVD BLADE 7" LG BLADE BLUNT	9.00	EA	0.080	0.004
6515003640920	SCISSORS GEN SURG MAYO DSGN 6.50-7" LG BLUNT PTS 1.626" CUT LG	4.00	EA	0.35	0.01
6515010895668	SCISSORS GEN SURG METZENBAUM DELICATE DISSECTING 11" LG CRVD	3.00	EA	0.460	0.015
6515003656200	SCISSORS TENOTOMY STEVENS 4-4.50" O/A LG CRVD BLADE BLUNT POINTS	3.00	EA	0.060	0.002
6515003657100	SCISSORS TONSIL METZENBAUM 7" O/A LG CRVD BLADE BLUNT POINTS	9.00	EA	0.160	0.005
6515011397550	SPECULUM RECTAL PRATT 8.50"LG 3.50X1.75" BLADE SETSCREW LOCK CRS	2.00	EA	0.010	0.001
6515010394884	SPHYGMOMANOMETER ANEROID 300MM MAX CALIBR W/CLIP FOR CUFF	7.00	EA	1.25	0.10
6530008902025	STAND BASIN ALUMINUM 32X15.25X17IN	1.00	EA	5.830	0.667
6515013146694	STETHOSCOPE COMBINATION LITTMAN CLASSIC II 28"LG BELL-DIAPHRAGM	7.00	EA	1.000	0.003
6515011721152	STETHOSCOPE ELECTRONIC NON-INVASIVE PORTABLE BATTERY OPER	1.00	EA	2.000	0.100
6515012080576	STIMULATOR NERVE PERIPHERAL HIGH/LOW OUTPUT AMPERAGE	1.00	EA	1.000	0.040
6515014350050	SUCTION APPARATUS SURGICAL PORTABLE	4.00	EA	5.00	0.50
6530013215592	TABLE OPERATING FIELD PORTABLE SURGICAL W/MAYO TRAY (Note: ASSTC)	1.00	EA	80.00	2.70
NSN PENDING	THERMO EXCHANGE CHAMBER	2.00	EA	3.50	0.82
6530007939945	TRAY INSTRUMENT CORROSION-RESISTING STEEL 10.5x8x2 INCHES	3.00	EA	1.50	0.15

Appendix D
FRSS Equipment List

NSN	Item Nomenclature	QTY	U/I	Weight	Cube
6530007940000	TRAY INSTRUMENT CORROSION-RESISTING STEEL 15-1/2X9-1/2X2 INCHES	3.00	EA	2.86	0.19
6515010764713	TROUSERS PNEUMATIC THREE BLADDER FLEXIBLE	1.00	EA	10.00	1.00
6515011929456	ULTRASONIC UNIT BLOOD FLOW DETECTION 120/230V 50/60HZ DOPPLER	1.00	EA	8.50	0.30
NSN PENDING	ULTRASOUND UNIT HANDHELD PORTABLE SONOSITE 180 BATTERY & AC	1.00	EA	5.4	0.25
6515013556479	VAPORIZER ANESTHESIA DRAWOVER W/CASE	1.00	EA	20.000	2.000
6530014640267	VENTILATOR VOLUME PTBL 8.870X11.5IN UNI-VENT 120/220V AC	3.00	EA	13.000	0.750

TOTAL WEIGHT=Σ(QUANTITY X UNIT WEIGHT) IN POUNDS =

711.5 lbs.

TOTAL VOLUME=Σ(QUANTITY X UNIT CUBE) IN CUBIC FEET =

40.7 cu. ft.

Appendix E FRSS Consumable List

NSN	Item Nomenclature	Qty	U/I	Weight	Cube
6505002998179	ALBUMIN HUMAN USP 25% 100ML CAN	17.00	CN	0.94	0.03
6505011169245	ALBUTEROL INHALATION AEROSOL 17GM CONTAINER 200 METERED SPRAYS	1.00	PG	0.13	0.01
6505007542547	ATROPINE SULFATE INJ 0.4MG/ML 20ML VIAL	2.00	VI	0.14	0.01
6505011277946	BUPIVACAINE HYDROCHLORIDE INJECTION USP .50% 30ML VIAL 10S	3.00	PG	1.90	0.05
6505010100832	CEFAZOLIN SODIUM EQUIVALENT TO 1GM VI	14.00	BT	0.06	0.00
6505011196005	CEFOXITIN SODIUM 1GM/VI 25 VI	1.00	PG	1.75	0.04
6505012192760	CEFTRIAXONE SODIUM 1GM VIAL 10 VI	1.00	PG	0.70	0.03
6505013859409	EPHEDRINE SULFATE 50MG/ML INJ AMPS 100S	9.00	PG	1.35	0.02
6505012385634	EPINEPHRINE INJ 1ML SYRINGE-NEEDLE UNIT	2.00	EA	0.03	0.00
6505010731316	FENTANYL CITRATE INJECTION USP 5ML AMPUL 10 AMPULES PER BOX	4.00	PG	0.33	0.01
6505010197627	GLYCOPYRROLATE INJ 0.2 MG PER ML 20 ML	5.00	BT	0.17	0.01
6505001539740	HEPARIN SODIUM INJ1000 UNITS PER ML 10 ML	14.00	VI	0.11	0.00
6505011179832	ISOFLURANE USP 100ML	10.00	BT	0.14	0.01
6505011533733	KETAMINE HCl NJ 100MG/ML 5ML VI 10S	1.00	PG	0.05	0.00
6505012447982	LABETALOL HCl INJ 5MG/ML 20ML VIAL	7.00	VI	0.12	0.00
6505003343461	LIDOCAINE HCl INJ 50ML VIAL 25S	1.00	PG	0.16	0.01
6505005843131	LIDOCAINE HYDROCHLORIDE JELLY 2% 30 ML	2.00	PG	0.15	0.01
6505001538809	LUBRICANT SURGICAL 4 OZ (113.4 GM)	3.00	TU	0.35	0.02
6505011253253	MANNITOL INJECTION USP 25% 50ML SINGLE DOSE VIALS 25 VIALS/PG	3.00	PG	6.75	0.18
6505011080808	METHYLPREDNISOLONE SODIUM SUCCINATE FOR INJECTION USP 1000MG	8.00	CO	0.12	0.00
6505012415747	MIDAZOLAM HYDROCHLORIDE INJECTION 5MG/ML 2ML VIAL 10/PACKAGE	2.00	PG	0.21	0.01
6505001490113	MORPHINE SULFATE INJECTION USP 10MG/ML 1ML CARTRIDGE-NEEDLE 10S	10.00	BX	0.28	0.10
6505000797867	NALOXONE HYDROCHLORIDE INJECTION USP 0.4MG/ML 1ML AMPUL 10/BX	2.00	BX	0.12	0.05
6505009586325	NEOSTIGMINE METHYLSULFATE INJECTION USP 10ML MULTIPLE DOSE VIAL	9.00	VI	0.10	0.00
6505001049320	PHENYLEPHRINE HCl INJ 1% 1 ML 25S	1.00	BX	0.42	0.03
6505013329024	PHENYTOIN SODIUM INJECTION USP 50MG/ML VIAL 5ML 25S	1.00	PG	1.00	0.01
6505006807352	PROMETHAZINE HYDROCHLORIDE INJECTION 25MG/ML 1ML AMPUL 25/BX	1.00	BX	0.31	0.02
FUTURE TECH	SALINE HYPERTONIC 500CC 12S	2.00	PG		
6505010880499	SCOPOLAMINE HYDROBROMIDE INJ 0.4 MG/ML 1ML VI 25S	1.00	PG	0.40	0.01
6505013306269	SODIUM CHLORIDE INJ 1000ML BAG 12S (Note: Can be used w/pulse irrigator)	23.00	PG	7.10	0.12
6505010282260	SUCCINYLCHOLINE CHLORIDE STERILE USP 1GM CONTAINER 12 PER BOX	1.00	PG	0.42	0.03
6505005607331	SULFADIAZINE SILVER CREAM 1% TOPICAL 400GM JAR	1.00	JR	1.25	0.05
6505005824737	TETRACAINE HYDROCHLORIDE OPHTHALMIC SOLUTION 0.5% 15 ML	1.00	BT	0.10	0.01
6505010410558	THIOPENTAL SODIUM FOR INJECTION USP 500MG VIAL 25 VIALS/PACKAGE	1.00	PG	0.28	0.02
6505012144500	THROMBIN USP BOVINE DERIVED 20000 UN THROMBIN 20ML SPRAYER 2S	5.00	PG	0.60	0.04

Appendix E FRSS Consumable List

NSN	Item Nomenclature	Qty	U/I	Weight	Cube
6505012582004	VECURONIUM BROMIDE INJ 1MG/ML 10ML VI 10S	4.00	PG	0.95	0.07
6510009268883	ADHESIVE TAPE SURGICAL POROUS WOVEN 2 INCHES BY 10 YARDS 6S	4.00	PG	1.28	0.01
6515013215211	AIRWAY KIT PERCUTANEOUS EMERGENCY ADULT STERILE DISPOSABLE	2.00	EA	0.20	0.05
6515011295437	AIRWAY NASOPHARYNGEAL ARGYLE DESIGN 28FR 6.9X9MM CRVD PLAS 10S	1.00	PG	0.25	0.00
6515011649637	AIRWAY PHARYNGEAL 4" AIRWAY/CUT AWAY FLANGE KINK RES 30FR 30S	1.00	PG	1.00	0.01
6510012404514	APPLICATOR BENZOIN TINCTURE IMPREGNATED 4INCH SWABSTICK 500S	0.10	PG	0.08	0.00
6530011075798	BAG STERILIZATION-BIOHAZARD DISPOSAL 36X24" .0030" SGL WALL200	1.00	PG	17.00	0.44
6515014618338	BANDAGE CAST POLYMER SPLINTING MATERIAL LONG BONE 6" x 45" 5S	2.00	BX	0.15	0.02
6515014618657	BANDAGE CAST POLYMER SPLINTING MATERIAL WHOLE ARM 4"x30" 5S	2.00	PG	0.15	0.02
6510001058507	BANDAGE ELAS RUBBER BRN 3"x5yds 24S (Note: Coban)	1.00	PG	6.94	0.13
6510000583047	BANDAGE GAUZE 6-PLY ROLLED WHITE STERILE 4YDx4.5IN 100s (Note: Kerlix)	1.00	PG	1.15	0.03
6135009857845	BATTERY NONRECHAR ALK 1.5 VOLT AA CELL	6.00	PG	0.10	0.00
6135008264798	BATTERY NONRECHAR ALK 1.5 VOLT AAA 24S	1.00	PG	0.08	0.00
6135010631978	BATTERY NONRECHARGE 9V 2 TERM .656"W X 1.031"L X 1.906"H DRY	1.00	PG	0.10	0.00
6515012812858	BLADE EXTENDED ELECTROSURG ELECTRODE 6" SIZE DISP 40S	1.00	PG	0.03	0.00
6515006600011	BLADE SURG KNIFE DET NO.10 SMALL TANG U/W 3 3L 7 9 HANDLE CS 6S	1.00	PG	0.03	0.00
6515010095293	BLADE SURG KNIFE DET NO.15 SMALL TANG U/W 3 3L 7 9 HDL STEEL150S	1.00	PG	1.12	0.05
6515013719617	BLOOD & IV WARMING SET 8'LG 18MM STER30S	0.50	PG	11.00	1.50
6515011281407	BLOOD RECIPIENT SET INDIRECT TRANSFUSION Y TYPE NONTOXIC 48S	0.50	PG	8.00	1.40
6515013637700	BOARD SPINAL FOLDING HEAVY GAUGE ALUM FOLDED SIZE 18.50X36X2.75"	1.00	EA	10.00	3.00
6530011642727	BRUSH SURG SCRUB 3" SHOE HDL W/ HEXACHLOROPHENE DISPENSER 144S	1.00	PG	1.00	0.01
6515011067648	CANISTER ASSY SUCTION SURG 1500CC BUILT-IN FILTER SNAP-ON LID 100S	0.04	EA	43.40	4.20
6515010726380	CANNULA LARYNGEAL YANKAUER W/ 72" LG CLEAR TUBING 20S	2.00	PG	0.43	0.03
6532013277237	CAP OPERATING SURG UNIV SZ BOUFF DISP 100S	1.00	PG	3.20	0.01
6515004588411	CATHETER & CONN SUCT TRACH DSGN 14FR WHISTLE TIP 2 EYES MAX 50S	1.00	PG	3.55	0.62
6515013909627	CATHETER & NEEDLE UNIT 14GA ORANGE PROTECTOCATH DISP 200S	1.00	PG	5.70	0.03
6515013909654	CATHETER & NEEDLE UNIT 18GA GREEN PROTECTOCATH DISP 200S	1.00	PG	22.50	0.14
6515011399050	CATHETER CARDIO FOGARTY EMBOLECTOMY 4FR 80CM LG 1ML SYR CAP	5.00	EA	0.01	0.00
6515011774924	CATHETER CARDIO FOGARTY EMBOLECTOMY 6FR 80CM LG MALE	5.00	EA	0.11	0.00
6515001450011	CATHETER URETHRAL ROB-NEL B1 STR 8FR ADL RD TIP STER DISP 100S	0.04	PG	2.25	0.50
6515001490104	CATHETERIZATION KIT URETHRAL W/BOT-OUTLET DRAIN BAG & 16FR CATH	12.00	EA	0.71	0.25
6510010854742	CELLULOSE OXIDIZED REGEN 8X4" YELLOW 1 PLY 24S (Note: Surgicel)	2.00	PG	0.50	0.05
6850010735955	CLEANER & LUBE SURG INSTR 16 OZ CAN 6S	0.15	PG	5.00	0.40
6515009269201	CONNECTOR TUBING STRAIGHT A18 TAPER SERRATIONS 3.5"LG .188"ID	1.00	PG	0.65	0.06
6515007257843	CONNECTOR TUBING Y BRANCHED SERRATED 0.188-0.312" 50S	1.00	PG	0.26	0.03
6530014604782	CONTAINER SHARPS BOARD FOLD-FLAT 5 LT	11.00	EA	0.55	0.18

Appendix E FRSS Consumable List

NSN	Item Nomenclature	Qty	U/I	Weight	Cube
402001111766	CORD FIBROUS PLASTIC POLYESTER 4.8MM DIAMETER 100 FEET NATURAL	1.00	RO	0.50	0.04
NSN PENDING	COVER BOOT SURGICAL DISP 25S	2.00	PG	0.75	0.25
6515003245500	DEPRESSOR TONGUE STRAIGHT 100S	1.00	PG	0.69	0.04
PART# 99-0582	DETERGENT SURG INSTR ENZYMATIC 1OZ (Note: Medicine LF)	10.00	EA	0.01	0.00
6515012478232	DISC ADHESIVE 1.25" DIA 11/32" APERATURE DOUBLE FACED 612S	0.16	PG	0.50	0.06
NSN PENDING	DISINFECTANT INSTR IGL (Note: Cidex OPA)	2.00	GL	3.00	0.10
6515013086381	DRAIN SURG HACIENDA WOUND EVACUATOR TUBE ADULT 28FR RADPQ 10S	1.00	PG	1.40	0.22
6515013414524	DRAINAGE KIT CLO SUCT JACKSON-PRATT RADPQ 7MM W DRAIN STERILE 5S	2.00	PG	0.31	0.60
6515013928438	DRAINAGE UNIT PLEURAL CAVITY 3-CHAMBER W/BLOOD RETRIVAL 3S	2.00	EA	1.00	0.50
6515010587450	DRAINAGE UNIT PLEURAL CAVITY PLAS WATER-SEAL 3 CHAM 2300ML 6S	0.50	BX	1.50	0.17
6530011501479	DRAPE SURGICAL 116x81" DBL THK DISP STER 46" SPLIT 1" ADHES AREA 13S	3.00	PG	19.50	1.37
6510014575844	DRESSING BURN 8x18" SATURATED W/WATER GEL 20S	0.50	PG	7.50	1.56
6510014081920	DRESSING CHEST WOUND SEAL 10S	1.00	PG	0.20	0.00
6510002017430	DRESSING FIRST AID FIELD CAMOUFLAGED 7.75-8.25"LG 7.25-7.75"W	39.00	EA	0.29	0.02
6510000835573	DRESSING FIRST AID FIELD WHITE 4"W X 6.250-7.250" LG ABSORBENT	44.00	EA	0.14	0.01
6515011977649	ELECTRODE GROUNDING ELECTROSURG PREGELLED SELF ADH PLAS 50S	0.50	PG	2.10	0.15
6515013253715	FIXATION DEVICE EXTERNAL STER	6.00	EA	0.75	0.08
7530002815941	FOLDER SET MANILA 8X11 CUT 100S	1.00	HD	9.66	0.48
7540006344122	FORM PRINTED CLINICAL RECORD 100S	1.00	PG	0.01	0.00
7540006344157	FORM PRINTED CLINICAL RECORD ANESTHESIA 10.5IN L X 8IN W 100S	1.00	HD	0.15	0.01
7540006344121	FORM PRINTED CLINICAL RECORD-DOCTORS ORDERS STD FORM 508	1.00	HD	0.01	0.00
6510002020800	GAUZE PETROLATUM STEP BACK ACCORDION WHITE 18X3" 12S	1.00	PG	0.44	0.02
6515012157751	GEL CONDUCTOR ELECTROSURGICAL NONDRYING 8 OZ	1.00	PG	0.36	0.02
6510000802054	GELATIN SPONGE ABSORB INDIV SEALED 12.5x8x1CM 6S (Note: Gelfoam)	6.00	PG	0.39	0.13
6515002267692	GLOVE PATIENT EXAM/TREAT LARGE SZ PREPWDR SNUG FITTING CUFF 100S	1.00	PG	4.70	0.47
6515013648553	GLOVE PATIENT EXAM/TREAT MEDIUM PREPWDR SNUG FITTING CUFF100S	3.00	PG	1.20	0.10
6515012611137	GLOVES SURGEONS GEN SURG SZ 7.0 PWDR-FREE RUBBER STER DISP 50S	1.00	PG	2.40	0.36
6515012534260	GLOVES SURGEONS GEN SURG SZ 7.5 PWDR-FREE RUBBER STER DISP 50S	2.00	PG	4.00	0.36
6515012522484	GLOVES SURGEONS GEN SURG SZ 8.0 PWDR-FREE RUBBER STER DISP 50S	1.00	PG	4.56	0.36
NSN PENDING	HYPOTHERMIA WARMING MITT 8S	1.00	PG	28.00	2.00
6515011050614	INTRAVENOUS INJECTION SET 12 COMPONENTS NONVENTED STER DISP 50S	2.00	PG	0.13	0.03
6515012738647	INTRODUCER SET CATHETER PERCUTANEOUS 4 COMP 20CM LG	4.00	EA	0.03	0.00
6515012321857	LIGATURE UMBILICAL 30X0.125" COTTON BRAIDED STERILE 24S	1.00	PG	0.10	0.01
6515011656718	LOOP VASCULAR SURG RBBR BLUE 37CMX2.5MM OVAL LOOP BLUNT10S	2.00	PG	1.00	0.04
7520013964722	MARKER TUBE TYPE BLACK PERM ULTRA FINE PT SHARPIE 12S	1.00	PG	0.00	0.40
6515007822621	MASK SURGICAL NON-WOVEN FABRIC GLASS OR SYN FIBER FILTER DISP50S	1.00	PG	1.25	0.21

Appendix E FRSS Consumable List

NSN	Item Nomenclature	Qty	U/I	Weight	Cube
6515007542834	NEEDLE HYPO C13A GP 18GA 1.438-1.562" LG LUER LOCK REG STER 100S	1.00	PG	0.66	0.04
6515007542836	NEEDLE HYPO C13A GP 20GA 1.438-1.562" LG LUER LOCK REG STER 100S	2.00	PG	0.76	0.04
6515011727650	NEEDLE HYPODERMIC GP 22GA 1.50" LG LUER LOCK PLASTIC HUB STER 100S	2.00	PG	0.48	0.50
6510007755706	PAD ABDOMINAL 7.5X8" WHITE 3LAYERS STER SEAL PKG POST OP 240S	0.20	PG	15.00	3.20
6515014594403	PAD DEFIBRILLATOR AUTOMATIC EXTERNAL 2-PACK	1.00	PG	3.25	1.15
6510007863736	PAD ISOPROPYL ALCOHOL IMPREG NONWVN COTTON/RAYON1.5 X 2"100	4.00	PG	0.50	0.10
6515011535294	PAD MAGNETIC NEEDLE & BLADE DISP 96S	0.25	PG	0.80	0.20
6510010100307	PAD POVIDONE-IODINE IMPRE STER COTTON/RAYON 2X1.375" BROWN 100S	1.00	PG	0.68	0.05
6515013148918	PENCIL ELECTRODE ELECTROSURG STRAIGHT SHAPE 10 FOOT CORD 50S	1.00	PG	0.10	0.00
6530010503557	PREP KIT SKIN PREOPERATIVE STERILE 20S	1.00	PG	0.82	0.84
6515013225898	RAZOR SURG PREPARATION PLAS STATIONARY DSGN SOLID HDL DISP 100S	0.50	PG	0.01	0.00
6515003632700	SAW BONE CUTTING WIRE 20" LONG .040" DIAMETER W/O HANDLE	4.00	EA	0.03	0.00
PART # SA8575	SCRUBS ENDOSCOPIC PLASTIC DISP 100S	1.00	PG	1.00	0.75
6515011700642	SHUNT CAROTOID BYPASS 10.687 O/A LG TAPERED 17-10 FR DIAMETER 5S	1.00	PG	0.20	0.00
6515014687929	SHUNT SUNDT HEPARIN BONDED LARGE	9.00	EA	0.40	0.01
6515012254681	SPLINT STRUCTURAL ALUMINUM MALLEABLE 4.5"x36" GRAY 12S	2.00	PG	5.00	0.48
6515012508936	SPLINT TRACTION-EXTRICATION ADULT ALUMINUM DUAL-HINGED W/CASE	1.00	EA	1.50	0.10
6510011603261	SPONGE LAPAROTOMY DISP RADIOPAQUE 18"X18" PREWASHED 100S	2.00	PG	10.60	2.56
6510001161285	SPONGE SURG GAUZE 4X8" WHITE RADPQ STER 80S	1.00	PG	25.00	5.00
6510002940009	SPONGE SURG GAUZE7X6" STER 32 PLY WHITE 600S	1.00	PG	0.01	0.00
NSN PENDING	STAPLE UNIT SURG GASTROINTEST 80 4 8 DISP 12S	2.00	PG	0.18	2.20
NSN PENDING	STAPLE UNIT SURG THORACIC-ABDOMINAL 4.8MM TU W/55 STAPLES 3S	1.00	PG	0.55	0.03
6515012525599	STAPLER SKIN SURG STER DISP LIGHTWEIGHT STAPLES SZ WIDE 6s	6.00	PG	0.01	0.00
6515011405352	STETHOSCOPE ESOPHAGEAL DISP 19"LG 24 FR 20S	1.00	BX	0.41	0.02
6515008648864	STOPCOCK IV THERAPY 3-WAY 20-30"LG W/MALE LUER STERILE 50S	1.00	PG	1.88	0.35
6515013948327	STYLET TRACHEAL TUBE 7.5-10MM DISP 10S	1.00	PG	2.10	0.02
NSN PENDING	SUCTION & IRRIGATION ASSEMBLY SURGICAL DISP STRYKER INTERPULSE 6S	1.00	EA	3.50	0.38
6515011676666	SUCTION SET TRACHEAL 14FR 22"L STER DISP 100S (Note: Yankauer w/tubing)	0.20	PG	4.00	0.10
6515014663004	SUPPORT CERVICAL COLLAR ADJUSTABLE SIZES 1-16 FOLDS FLAT	4.00	EA	0.25	0.01
6515013553928	SUTURE ABS GI SZ 3-0 1 27" STRAND NDL SH-1 COATED VICRYL BR 36S	2.00	PG	0.24	0.02
6515012615870	SUTURE ABS SUTUPAK SZ3-0 12 18" STRANDS COATED VICRYL ORDER BY2S	1.00	PG	0.86	0.05
6515009526897	SUTURE ABS UROLOGICAL SZ 4-0 27" LG NDL RB-1 1/2 CIR TWISTED 36S	2.00	PG	0.40	0.04
6515013549470	SUTURE ABSORB OB/GYN SZ 0 1 36" STRAND NDL COATED VICRYL BR 36S	1.00	PG	0.24	0.02
6515012193856	SUTURE NONABS GEN CLO SZ 1 30" LG NDL CT BLUE MONO ORDER BY 3S	1.00	PG	0.80	0.01
6515000678242	SUTURE NONABS SIZE 4-0 18" LG PERMA-HAND SUTUPAK SILK BLACK 36S	5.00	PG	0.73	0.04
6515011535730	SUTURE NONABS SURG CARDIO SZ 3-0 DBL ARMED MONOFILAMENT 36S	1.00	PG	0.25	0.01

Appendix E FRSS Consumable List

NSN	Item Nomenclature	Qty	U/I	Weight	Cube
6515011535733	SUTURE NONABS SURG GEN CLO SZ 1 SGL ARMED MONO PLAS 60" STER 12S	1.00	PG	0.78	0.06
6515007638483	SUTURE NONABS SURG SZ 3-0 UNARMED SILK BLACK BR 2.5'LG STER 36S	1.00	PG	0.36	0.02
6515010113675	SUTURE NONABS SURG SZ 4-0 3'LG DBL ARMED MONO BLUE PLAS STER 36S	1.00	PG	0.25	0.01
6515003307179	SUTURE NONABS SZ 0 2.50' LG NDL CT-1 SGL ARMED MONO ORDER BY 3S	2.00	DZ	0.25	0.03
6515007344342	SUTURE NONABS SZ 4-0 1 18" STRAND C3 RVS CUTTING EDGE NYLON 36S	1.00	PG	0.73	0.04
6515010758288	SUTURE NONABSORB 2-0 2.5' SILK BLACK UNARMED BRAIDED STER 36S	3.00	PG	0.21	0.02
6515007540412	SYRINGE HYPO GP 10ML CAP LUER SLIP W/O NDL 100S	3.00	PG	5.80	0.57
6515014123101	SYRINGE HYPO GP 20CU CM DISP STER 25S	1.00	PG	1.20	0.01
6515014123099	SYRINGE HYPODERMIC GENERAL PURPOSE 60CU CM STER DISP20S	1.00	PG	1.10	0.01
6515004627348	SYRINGE HYPODERMIC GP 3ML CAP LUER LOCK TIP PLAS STER DISP 100S	1.00	PG	2.00	0.19
6515014570288	SYRINGE IRRIGATING 60ML PISTON 120S	0.10	PG	1.25	0.25
8465013376792	TAG ID PERSONNEL CARDBOARD 8.1x4" FIELD TRIAGE 200S	1.00	PG	0.20	0.40
NSN PENDING	TIP IRRIGATOR SURGICAL STER DISP 10S	1.00	PG	0.01	0.00
6530013472340	TOWEL PACK SURG STER DISP HIGHLY ABS CELL BLUE SURG/POSTOP 20S	5.00	PG	2.00	0.03
6515008669073	TUBE DRAINAGE SURGICAL C18 THORACIC 36FR STR 6 EYE STER DISP 10S	1.00	PG	1.54	0.10
6515011885316	TUBE DRAINAGE SURGICAL PENROSE 1x18" RUBBER STER 200S	0.25	PG	3.44	0.02
6515005628308	TUBE INHALER FORCE-FIT 72"LG PLASTIC W/MOLDED RESILIENT TAPE 50S	0.50	PG	4.50	0.90
6515001490316	TUBE STOMACH SURG SALEM E19 W/FUNNEL 16FR DBL LUMEN 48" LG 50S	0.50	PG	4.00	0.70
6515012774772	TUBE SUCT SURGICAL SUCTION BULBOUS 5MM ID NONSTERILE 100FT	1.00	PG	2.10	0.00
6515001050759	TUBE TRACHEAL MURPHY E12 W/CUFF 8.0MM ID 10.7MM DIA 32CM LG 10S	1.00	PG	1.00	0.05
6515010369034	TUBE TRACHEAL RADIOPAQUE MURPHY DISP 7.5MM ID 9.3MM OD 32CMLG10S	1.00	PG	1.20	0.26
6515011470204	TUBE TRACHEOSTOMY SHILEY SIZE 6 30FR W/OBTURATOR & HIGH VOL DISP	1.00	EA	0.11	0.01
6515011742354	TUBING SUCTION SURG SUCTION 144IN LG 9/32IN DIA TRANSPARENT 20S	1.00	PG	0.14	0.03
6515009269150	VALVE SURG DRAIN HEIMLICH 4.50" LG 1" DIA FLUTTER RBBR STER 10S	1.00	PG	0.06	0.02
6530010862464	WRAPPER STERILIZE BLUE 54X54" PLAS DISP 100S	1.00	PG	21.60	2.53

TOTAL WEIGHT=Σ(QUANTITY X UNIT WEIGHT) IN POUNDS = 663.5 lbs..

TOTAL VOLUME=Σ(QUANTITY X UNIT CUBE) IN CUBIC FEET =

61.8 cu. ft.

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<p>Abstract: For every casualty that dies of wounds in a hospital, nine have died prior to arriving. The challenge to medical planners becomes the placement of highly mobile, resuscitative surgery units as close to the point of injury as possible. The primary objective of this study was to determine the medical supply requirements for a highly mobile forward resuscitative surgical system (FRSS). To achieve the required level of mobility, FRSS procedures were limited to those that could be conducted in an abbreviated, staged manner. Projecting materiel requirements involved four primary steps. First, the patient population was determined. Next, treatment profiles detailing the step-by-step process of providing a resuscitative intervention for each patient were developed. From the profiles, individual clinical tasks were derived. Once the individual clinical tasks had been identified, the materiel required to conduct them was assigned. Each data element was then organized into a model that described the patient work load and treatment process for an FRSS. Finally, a hypothetical patient stream, using the probability of each patient occurring was created to project the medical supply requirements for an 18 patient FRSS capability. Results of the study showed 59 patient types as FRSS candidates and that 74 primary clinical procedures would be performed on them within the three functional areas of triage, operating room, and post-op. Furthermore, 277 medical items, weighing 1375.0 lbs. would be required to support the projected patient workload. The methodology used in the current study was designed to support the examination of multiple facets of the Marine Corps field medicine. It is structured modularly, which provides flexibility in adding or reducing capabilities when projecting the effect of a change in the system is desired. As the shelter concepts to house the FRSS are developed, it may be desirable to apply this approach to examine their utility as a BAS, a mobile sickcall, in staging a preventive medicine capability, or in providing civilian care during military missions other than war.</p>				
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